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**261 - IDENTIFICATION AND LISTING OF
HAZARDOUS WASTE
Subpart A - General**

261.1 Purpose and Scope

(a) This part identifies those solid wastes which are subject to regulation as hazardous wastes under Regulations R.61-79.124, .262 through .266, .268, .270, and 40 CFR 271, and which are subject to the notification requirements of the South Carolina

Hazardous Waste Management Act 44-56-120 and section 3010 of RCRA. In this part: (11/90; 12/92)

(1) Subpart A defines the terms "solid waste" and "hazardous waste," identifies those wastes which are excluded from regulation under R.61-79.262 through 266, 268, and R.61-270, and establishes special management requirements for hazardous waste produced by conditionally exempt small quantity generators and hazardous waste which is recycled.

(2) Subpart B sets forth the criteria used by the Department to identify characteristics of hazardous waste and to list particular hazardous wastes.

(3) Subpart C identifies characteristics of hazardous waste.

(4) Subpart D lists particular hazardous wastes.

(b)(1) The definition of solid waste contained in this part applies only to wastes that also are hazardous for purposes of the regulations implementing the South Carolina Hazardous Waste Management Act 44-56-10 et seq and Subtitle C of RCRA. For example, it does not apply to materials (such as nonhazardous scrap, paper, textiles, or rubber) that are not otherwise hazardous wastes and that are recycled (12/92; 12/93).

(2) This part identifies only some of the materials which are solid wastes and hazardous wastes under SCHWMA 44-56-10 et seq. and sections 3007, 3013, and 7003 of RCRA. A material which is not defined as a solid waste in this part, or is not a hazardous waste identified or listed in this part, is still a solid waste and a hazardous waste for purposes of these sections if:

(i) In the case of SCHWMA 44-56-90 and sections 3007 and 3013 of RCRA, the Department has reason to believe that the material may be a solid waste within the meaning of section 44-56-20(6) of the S.C. Code of Laws of 1976, as amended or a solid waste within the meaning of section 1004(27) of RCRA and a hazardous waste within the meaning of section 1004(5) of RCRA; or (11/90, 11/99)

(ii) In the case of SCHWMA 44-56-50 or RCRA section 7003, the statutory elements are established.

(c) For the purposes of sections 261.2 and 261.6:

(1) A "spent material" is any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing;

(2) "Sludge" has the same meaning used in 260.10;

(3) A "by-product" is a material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a co-product that is produced for the general public's use and is ordinarily used in the form it is produced by the process.

(4) A material is "reclaimed" if it is processed to recover a usable product, or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents.

(5) A material is "used or reused" if it is either:

(i) Employed as an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one process used as feedstock in another process). However, a material will not satisfy this condition if distinct components of the material are recovered as separate

end products (as when metals are recovered from metal-containing secondary materials); or

(ii) Employed in a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorous precipitant and sludge conditioner in wastewater treatment).

(6) "Scrap metal" is bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e.g., radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled.

(7) A material is "recycled" if it is used, reused, or reclaimed.

(8) A material is "accumulated speculatively" if it is accumulated before being recycled. A material is not accumulated speculatively, however, if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that - during the calendar year (commencing on January 1) - the amount of material that is recycled, or transferred to a different site for recycling, equals at least 75 percent by weight or volume of the amount of that material accumulated at the beginning of the period. In calculating the percentage of turnover, the 75 percent requirement is to be applied to each material of the same type (e.g., slags from a single smelting process) that is recycled in the same way (i.e., from which the same material is recovered or that is used in the same way). Materials accumulating in units that would be exempt from regulation under section 261.4(c) are not to be included in making the calculation. (Materials that are already defined as solid wastes also are not to be included in making the calculation.) Materials are no longer in this category once they are removed from accumulation for recycling, however.

(9) "Excluded scrap metal" is processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal. (9/98)

(10) "Processed scrap metal" is scrap metal which has been manually or physically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes, but is not limited to scrap metal which has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, or separated by metal type (i.e., sorted), and, fines, drosses and related materials which have been agglomerated. (Note: shredded circuit boards being sent for recycling are not considered processed scrap metal. They are covered under the exclusion from the definition of solid waste for shredded circuit boards being recycled (261.4(a)(13)). (9/98)

(11) "Home scrap metal" is scrap metal as generated by steel mills, foundries, and refineries such as turnings, cuttings, punchings, and borings. (9/98)

(2) "Prompt scrap metal" is scrap metal as generated by the metal working/fabrication industries and includes such scrap metal as turnings, cuttings, punchings, and borings. Prompt scrap is also known as industrial or new scrap metal. (9/98)

(d) Used oil is subject to the applicable requirements of 266 only. (6/89; 12/92)

261.2 Definition of solid waste

(a) (1) A solid waste is any discarded material that is not excluded by section 261.4(a) or that is not excluded by variance granted under 260.30 and 260.31.

(2) A discarded material is any material which is (12/92):

(i) Abandoned, as explained in paragraph (b) of this section; or

(ii) Recycled, as explained in paragraph (c) of this section; or

(iii) Considered inherently waste-like, as explained in paragraph (d) of this section; or (9/98)

(iv) A "military munition" identified as a solid waste in 266.202. (9/98)

(b) Materials are solid waste if they are abandoned by being:

(1) Disposed of; or

(2) Burned or incinerated; or

(3) Accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated.

(c) Materials are solid wastes if they are recycled or accumulated, stored, or treated before recycling - as specified in paragraphs (c)(1) through (4) of this section.

(1) Used in a manner constituting disposal.

(i) Materials noted with an "x" in Column 1 of Table 1 are solid wastes when they are:

(A) Applied to or placed on the land in a manner that constitutes disposal; or

(B) Used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land (in which cases the product itself remains a solid waste).

(ii) However, commercial chemical products listed in section 261.33 are not solid wastes if they are applied to the land and that is their ordinary manner of use.

(2) Burning for energy recovery.

(i) Materials noted with an "x" in column 2 of Table 1 are solid wastes when they are:

(A) Burned to recover energy;

(B) Used to produce a fuel or are otherwise contained in fuels (in which cases the fuel itself remains a solid waste).

(ii) However, commercial chemical products listed in section 261.33 are not solid wastes if they are themselves fuels.

(3) Reclaimed. Materials noted with an "x" in column 3 of Table 1 are solid wastes when reclaimed. Materials noted with a "---" in column 3 of Table 1 are not solid wastes when reclaimed. (11/99, 8/00, 6/03).

(4) Accumulated speculatively. Materials noted with an "x" in column 4 of Table 1 are solid wastes when accumulated speculatively.

261.2 Table 1 Summary of definitions of Solid Waste				
[Note: The terms "spent materials," "sludges," "by-products," and "scrap metal" are defined in 261.1.] (11/99)	Use Constituting Disposal 261.2(c)(1) (1)	Energy Recovery/ Fuel 261.2(c)(2) (2)	Reclamation 261.2(c)(3) (8/00)(except as provided in 261.4(a)(17) for mineral processing secondary metals) (3)	Speculative Accumulation 261.2(c)(4) (4)
Spent Materials	(x)	(x)	(x)	(x)
Sludges (listed in Section 261.31 or .32)	(x)	(x)	(x)	(x)
Sludges exhibiting a characteristic of hazardous waste	(x)	(x)	---	(x)
By-products (listed in Section 261.31 or .32)	(x)	(x)	(x)	(x)
By-products exhibiting a characteristic of hazardous waste	(x)	(x)	---	(x)
Commercial chemical products listed in Section 261.33	(x)	(x)	---	---
Scrap metal other than excluded scrap metal (see 261.1(c)(9))	(x)	(x)	(x)	(x)

(d) Inherently waste-like materials. The following materials are solid wastes when they are recycled in any manner:

(1) Hazardous Waste Nos. F020, F021 (unless used as an ingredient to make a product at the site of generation), F022, F023, F026, and F028.

(2) Secondary materials fed to a halogen acid furnace that exhibit a characteristic of a hazardous waste or are listed as a hazardous waste as defined in subparts C or D of this part, except for brominated material that meets the following criteria: (12/92, 12/93)

(i) The material must contain a bromine concentration of at least 45%; and (12/93)

(ii) The material must contain less than a total of 1% of toxic organic compounds listed in appendix VIII; and (12/93)

(iii) The material is processed continually on-site in the halogen acid furnace via direct conveyance (hard piping). (12/93)

(3) The Department will use the following criteria to add wastes to that list (12/92):

(i) (A) The materials are ordinarily disposed of, burned, or incinerated; or

(B) The materials contain toxic constituents listed in Appendix VIII of 261 and these constituents are not ordinarily found in raw materials or products for which the materials substitute (or are found in raw materials or products in smaller concentrations) and are not used or reused during the recycling process; and

(ii) The material may pose a substantial hazard to human health and the environment when recycled.

(e) Materials that are not solid waste when recycled.

(1) Materials are not solid wastes when they can be shown to be recycled by being:

(i) Used or reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed or land disposed; or (5/96)

(ii) Used or reused as effective substitutes for commercial products; or

(iii) Returned to the original process from which they are generated, without first being reclaimed or land disposed. The material must be returned as a substitute for feedstock materials. In cases where the original process to which the material is returned is a secondary process, the materials must be managed such that there is no placement on the land. In cases where the materials are generated and reclaimed within the primary mineral processing industry, the conditions of the exclusion found at 261.4(a)(17) apply rather than this paragraph. (5/96, 11/99; 8/00)

(2) The following materials are solid wastes, even if the recycling involves use, reuse, or return to the original process (described in paragraphs (e)(1)(i) through (iii) of this section):

(i) Materials used in a manner constituting disposal, or used to produce products that are applied to the land; or

(ii) Materials burned for energy recovery, used to produce a fuel, or contained in fuels; or

(iii) Materials accumulated speculatively; or

(iv) Materials listed in paragraphs (d)(1) and (d)(2) of this section. (12/93, 11/99)

(f) Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation. Respondents in actions to enforce regulations implementing the SC Hazardous Waste Management Act Sections 44-56-10 et seq. and Subtitle C of RCRA who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they

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meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so (12/93, 11/99).

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(a) A solid waste, as defined in 261.2, is a hazardous waste if: (11/99)

(1) It is not excluded from regulation as a hazardous waste under 261.4(b); and (11/99)

(2) It meets any of the following criteria:

(i) It exhibits any of the characteristics of hazardous waste identified in subpart C of this part. However, any mixture of a waste from the extraction, beneficiation, and processing of ores and minerals excluded under 261.4(b)(7) and any other solid waste exhibiting a characteristic of hazardous waste under subpart C is a hazardous waste only if it exhibits a characteristic that would not have been exhibited by the excluded waste alone if such mixture had not occurred, or if it continues to exhibit any of the characteristics exhibited by the non-excluded wastes prior to mixture. Further, for the purposes of applying the Toxicity Characteristic to such mixtures, the mixture is also a hazardous waste if it exceeds the maximum concentration for any contaminant listed in table I to 261.24 that would not have been exceeded by the excluded waste alone if the mixture had not occurred, or if it continues to exceed the maximum concentration for any contaminant exceeded by the nonexempt waste prior to mixture. (11/90, 12/93, 11/99)

(ii) It is listed in subpart D and has not been excluded from the lists in subpart D of this part under 260.20 and 260.22.

(iii) [Reserved 6/02]

(iv) It is a mixture of solid waste and one or more hazardous wastes listed in subpart D of this part and has not been excluded from paragraph (a)(2) of this paragraph under 260.20 and 260.22, paragraph (g) of this section, or paragraph (h) of this section; however, the following mixtures of solid wastes and hazardous wastes listed in subpart D of this part are not hazardous wastes (except by application of paragraph (a)(2) (i) or (ii) of this section) if the generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under the S. C. Pollution Control Act Section 48-1-10 et seq., of the S. C. Code of Laws of 1976, as amended and under either section 402 or section 307(b) of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewater) and: (11/90; 12/93, 6/02)

(A) One or more of the following solvents listed in section 261.31 - carbon tetrachloride, tetrachloroethylene, trichloroethylene - Provided, That the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 1 part per million; or (5/96)

(B) One or more of the following spent solvents listed in Section 261.31 - methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents - provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed 25 parts per million; or

(C) One of the following wastes listed in 261.32, provided that the wastes are discharged to the refinery oil recovery sewer before primary oil/water/solids separation heat exchanger bundle cleaning sludge from the petroleum refining industry (EPA Hazardous Waste No. K050), crude oil storage tank sediment from petroleum refining operations (EPA Hazardous Waste No. K169), clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations (EPA Hazardous Waste No. K170), spent hydrotreating catalyst (EPA Hazardous Waste No. K171), and spent hydrotreating catalyst (EPA Hazardous Waste No. K172); or (8/00)

(D) A discarded commercial chemical product, or chemical intermediate listed in section 261.33, arising from de minimis losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this paragraph (a)(2)(iv)(D), "de minimis" losses include those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing; or (12/93)

(E) Wastewater resulting from laboratory operations containing toxic (T) wastes listed in subpart D of this part, provided, that the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of

the facility's wastewater treatment or pre-treatment system, or provided the wastes, combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pre-treatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation; or (5/96)

(F) One or more of the following wastes listed in 261.32-wastewaters from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K157)-Provided that the maximum weekly usage of formaldehyde, methyl chloride, methylene chloride, and triethylamine (including all amounts that can not be demonstrated to be reacted in the process, destroyed through treatment, or is recovered, i.e., what is discharged or volatilized) divided by the average weekly flow of process wastewater prior to any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of 5 parts per million by weight; or (5/96)

(G) Wastewaters derived from the treatment of one or more of the following wastes listed in 261.32-organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K156).- Provided, that the maximum concentration of formaldehyde, methyl chloride, methylene chloride, and triethylamine prior to any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of 5 milligrams per liter. (5/96)

(v) Rebuttable presumption for used oil. Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in subpart D of part 261 of this chapter. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, Third Edition, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in appendix VIII of part 261 of this chapter). EPA Publication SW-846, Third Edition, is available for the cost of \$110.00 from the Government Printing Office, Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954. 202-783-3238 (document number 955-001-00000-1). (11/99)

(A) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling agreement, to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner, or disposed. (11/99)

(B) The rebuttable presumption does not apply to used oils contaminated with

chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units. (11/99)

(b) A solid waste which is not excluded from regulation under paragraph (a)(1) of this section becomes a hazardous waste when any of the following events occur:

(1) In the case of a waste listed in subpart D of this part, when the waste first meets the listing description set forth in subpart D of this part.

(2) In the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in subpart D is first added to the solid waste. (8/00)

(3) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in subpart C of this part.

(c) Unless and until it meets the criteria of paragraph (d) of this part:

(1) A hazardous waste will remain a hazardous waste.

(2)(i) Except as otherwise provided in paragraph (c)(2)(ii), (g) or (h), any solid waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash emission control dust, or leachate (but not including precipitation run-off) is a hazardous waste. (However, materials that are reclaimed from solid wastes and that are used beneficially are not solid wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.) (6/02, 6/03)

(ii) The following solid wastes are not hazardous even though they are generated from the treatment, storage, or disposal of a hazardous waste, unless they exhibit one or more of the characteristics of hazardous waste:

(A) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332).

(B) Waste from burning any of the materials exempted from regulation by section 261.6(a)(3)(iii) and (iv) (12/92; 5/96; 8/00).

(C) (1) Nonwastewater residues, such as slag, resulting from high temperature metals recovery (HTMR) processing of K061, K062, or F006 waste, in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations or industrial furnaces (as defined in paragraphs (6), (7), and (13) of the definition for Industrial furnace" in 260.10), that are disposed in subtitle D units, provided that these residues meet the generic exclusion levels

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identified in the tables in this paragraph for all constituents, and exhibit no characteristics of hazardous waste. Testing requirements must be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan; at a minimum, composite samples of residues must be collected and analyzed quarterly and/or when the process or operation generating the waste changes. Persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements. (12/92; 12/93)

Constituent	Maximum for any single composite sample (mg/l)
Generic exclusion levels for K061 and K062 nonwastewater HTMR residues	
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70.
Generic exclusion levels for F006 nonwastewater HTMR residues	
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Cyanide (total) (mg/kg)	1.8
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70.0

(2) A one-time notification and certification must be placed in the facility's files and sent to the Department for K061, K062, or F006 HTMR residues that meet the generic exclusion levels for all constituents and do not exhibit any characteristics that are sent to subtitle D units. The notification and certification that is placed in the generators or treaters files must be updated if the process or operation generating the waste changes and/or if the subtitle D unit receiving the waste changes. However, the generator or treater need only notify the Department on an annual basis if such changes occur. Such notification and certification should be sent to the

Department by the end of the calendar year, but no later than December 31. The notification must include the following information: The name and address of the subtitle D unit receiving the waste shipments; the EPA Hazardous Waste Number(s) and treatability group(s) at the initial point of generation; and, the treatment standards applicable to the waste at the initial point of generation. The certification must be signed by an authorized representative and must state as follows: "I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment." (12/93; 5/96)

(D) Biological treatment sludge from the treatment of one of the following wastes listed in 261.32 - organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K157). (10/01)

(E) Catalyst inert support media separated from one of the following wastes listed in 261.32 Spent hydrotreating catalyst (EPA Hazardous Waste No. K171), and Spent hydrotreating catalyst (EPA Hazardous Waste No. K172). (8/00)

(d) Any solid waste described in paragraph (c) of this section is not a hazardous waste if it meets the following criteria:

(1) In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in subpart C of this part. (However, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of part 268, even if they no longer exhibit a characteristic at the point of land disposal) (12/92).

(2) In the case of a waste which is a listed waste under subpart D of this part, contains a waste listed under subpart D of this part or is derived from a waste listed in subpart D of this part, it also has been excluded from paragraph (c) under 260.20 and 260.22.

(e) For the purposes of this regulation the wastes listed in Appendix XI will be considered hazardous.

(f) Notwithstanding paragraphs (a) through (d) of this section and provided the debris as defined in part 268 does not exhibit a characteristic identified at subpart C of this part, the following materials are not subject to regulation under 260, 261 to 266, 268, or 270: (12/93)

(1) Hazardous debris as defined in part 268 that has been treated using one of the required extraction or destruction technologies specified in Table 1 of 268.45; persons claiming this exclusion in an enforcement action will have the burden of proving by clear and

convincing evidence that the material meets all of the exclusion requirements; or (12/93)

(2) Debris as defined in part 268 that the Department, considering the extent of contamination, has determined is no longer contaminated with hazardous waste. (12/93)

(g) (1) A hazardous waste that is listed in subpart D of this part solely because it exhibits one or more characteristics of ignitability as defined under 261.21, corrosivity as defined under 261.22, or reactivity as defined under 261.23 is not a hazardous waste, if the waste no longer exhibits any characteristic of hazardous waste identified in subpart C of this part. (6/02)

(2) The exclusion described in paragraph (g)(1) of this section also pertains to:

(i) Any mixture of a solid waste and a hazardous waste listed in subpart D of this part solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated under paragraph (a)(2)(iv) of this section; and

(ii) Any solid waste generated from treating, storing, or disposing of a hazardous waste listed in subpart D of this part solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated under paragraph (c)(2)(i) of this section.

(3) Wastes excluded under this section are subject to part 268 of this chapter (as applicable), even if they no longer exhibit a characteristic at the point of land disposal.

(4) Any mixture of a solid waste excluded from regulation under 261.4(b)(7) and a hazardous waste listed in Subpart D solely because it exhibits one or more of the characteristics of ignitability, corrosivity, or reactivity as regulated under paragraph (a)(2)(iv) is not a hazardous waste, if the mixture no longer exhibits any characteristic of hazardous waste identified in Subpart C for which the hazardous waste listed in Subpart D was listed. (6/03)

(h) (1) Hazardous waste containing radioactive waste is no longer a hazardous waste when it meets the eligibility criteria and conditions of 266, Subpart N ("eligible radioactive mixed waste"). (6/02)

(2) The exemption described in paragraph (h)(1) of this section also pertains to:

(i) Any mixture of a solid waste and an eligible radioactive mixed waste; and

(ii) Any solid waste generated from treating, storing, or disposing of an eligible radioactive mixed waste.

(3) Waste exempted under this section must meet the eligibility criteria and specified conditions in 266.225 and 266.230 (for storage and treatment). Waste that fails to satisfy these eligibility criteria and conditions is regulated as hazardous waste.

261.4 Exclusions

(a) Materials which are not solid wastes. The following materials are not solid wastes for the purpose of this part:

(1)(i) Domestic sewage; and

(ii) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly owned treatment works for treatment. "Domestic sewage" means untreated sanitary wastes that pass through a sewer system.

(2) Industrial wastewater discharges that are point source discharges subject to regulation under Section 48-1-10 et seq., of the S. C. Code of Laws of 1976, and section 402 of the Clean Water Act, as amended. (12/93)

[Comment: This exclusion applies only to the actual point source discharge. It does not exclude industrial wastewaters while they are being collected, stored or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment] (12/92).

(3) Irrigation return flows.

(4) Source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq.

(5) Materials subjected to in-situ mining techniques which are not removed from the ground as part of the extraction process.

(6) Pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless it is accumulated speculatively as defined in Section 261.1(c).

(7) Spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated speculatively as defined in Section 261.1(c).

(8) Secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process provided:

(i) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;

(ii) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators);

(iii) The secondary materials are never accumulated in such tanks for over twelve months without being reclaimed; and

(iv) The reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal.

(9) (12/92)

(i) Spent wood preserving solutions that have been reclaimed and are reused for their original intended purpose; and

(ii) Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood.

(iii) Prior to reuse, the wood preserving wastewaters and spent wood preserving solutions described in paragraphs (a)(9)(i) and (a)(9)(ii) of this section, so long as they meet all of the following conditions: (11/99)

(A) The wood preserving wastewaters and spent wood preserving solutions are reused on-site at water borne plants in the production process for their original intended purpose; (11/99)

(B) Prior to reuse, the wastewaters and spent wood preserving solutions are managed to prevent release to either land or groundwater or both; (11/99)

(C) Any unit used to manage wastewaters and/or spent wood preserving solutions prior to reuse can be visually or otherwise determined to prevent such releases; (11/99)

(D) Any drip pad used to manage the wastewaters and/or spent wood preserving solutions prior to reuse complies with the standards in part 265, subpart W of this chapter, regardless of whether the plant generates a total of less than 100 kg/month of hazardous waste; and (11/99)

(E) Prior to operating pursuant to this exclusion, the plant owner or operator submits to the appropriate Department a one-time notification stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion, and containing the following language: "I have read the applicable regulation establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the regulation." The plant must maintain a copy of that document in its on-site records for a period of no less than 3 years from the date specified in the notice. The exclusion applies only so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the appropriate Department for reinstatement. Department may reinstate the exclusion upon finding that the plant has returned to compliance with all conditions and that violations are not likely to recur. (11/99)

(10) EPA Hazardous Waste Nos. K060, K087, K141, K142, K143, K144, K145, K147, and K148, and any wastes from the coke byproducts processes that are hazardous only because they exhibit the Toxicity Characteristic (TC) specified in section 261.24 of this part when, subsequent to generation, these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar, or are mixed with coal tar prior to the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the wastes from the point they are generated to the point

they are recycled to coke ovens or the tar recovery or refining processes, or mixed with coal tar. (12/93, 6/04)

(11) Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before recovery. (12/93)

(12) (i) Oil-bearing hazardous secondary materials (i.e., sludges, byproducts, or spent materials) that are generated at a petroleum refinery (SIC code 2911) and are inserted into the petroleum refining process (SIC code 2911 - including, but not limited to, distillation, catalytic cracking, fractionation, or thermal cracking units (i.e., cokers)) unless the material is placed on the land, or speculatively accumulated before being so recycled. Materials inserted into thermal cracking units are excluded under this paragraph, provided that the coke product also does not exhibit a characteristic of hazardous waste. Oil-bearing hazardous secondary materials may be inserted into the same petroleum refinery where they are generated, or sent directly to another petroleum refinery, and still be excluded under this provision. Except as provided in paragraph (a)(12)(ii) of this section, oil-bearing hazardous secondary materials generated elsewhere in the petroleum industry (i.e., from sources other than petroleum refineries) are not excluded under this section. Residuals generated from processing or recycling materials excluded under this paragraph (a)(12)(i), where such materials as generated would have otherwise met a listing under subpart D of this part, are designated as F037 listed wastes when disposed of or intended for disposal. (5/96, 9/98; 8/00)

(ii) Recovered oil that is recycled in the same manner and with the same conditions as described in paragraph (a)(12)(i) of this section. Recovered oil is oil that has been reclaimed from secondary materials (including wastewater) generated from normal petroleum industry practices, including refining, exploration and production, bulk storage, and transportation incident thereto (SIC codes 1311, 1321, 1381, 1382, 1389, 2911, 4612, 4613, 4922, 4923, 4789, 5171, and 5172.) Recovered oil does not include oil-bearing hazardous wastes listed in subpart D of this part; however, oil recovered from such wastes may be considered recovered oil. Recovered oil does not include used oil as defined in 40 CFR 279.1. (8/00)

(13) Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled. (9/98)

(14) Shredded circuit boards being recycled provided that they are: (9/98)

(i) Stored in containers sufficient to prevent a release to the environment prior to recovery; and

(ii) Free of mercury switches, mercury relays and nickel cadmium batteries and lithium batteries.

(15) Condensates derived from the overhead gases from kraft mill steam strippers that are used to comply with 40 CFR 63.446(e). The exemption applies only to combustion at the mill generating the condensates. (11/99)

(16) Comparable fuels or comparable syngas fuels (i.e., comparable/syngas fuels) that meet the requirements of 261.38. (11/99, 8/00)

(17) Spent materials (as defined in 261.1) (other than hazardous wastes listed in subpart D of this part) generated within the primary mineral processing industry from which minerals, acids, cyanide, water, or other values are recovered by mineral processing, or by beneficiation, provided that: (11/99; 8/00, 6/03)

(i) The spent material is legitimately recycled to recover minerals, acids, cyanide, water or other values; (6/03)

(ii) The spent material is not accumulated speculatively; (6/03)

(iii) Except as provided in paragraph (a)(17)(iv) of this section, the spent material is stored in tanks, containers, or buildings meeting the following minimum integrity standards: a building must be an engineered structure with a floor, walls, and a roof all of which are made of non-earthen materials providing structural support (except smelter buildings may have partially earthen floors provided the secondary material is stored on the non-earthen portion), and have a roof suitable for diverting rainwater away from the foundation; a tank must be free standing, not be a surface impoundment (as defined in 260.10), and be manufactured of a material suitable for containment of its contents; a container must be free standing and be manufactured of a material suitable for containment of its contents. If tanks or containers contain any particulate which may be subject to wind dispersal, the owner/operator must operate these units in a manner which controls fugitive dust. Tanks, containers, and buildings must be designed, constructed and operated to prevent significant releases to the environment of these materials. (8/00, 6/03)

(iv) The Department may make a site-specific determination, after public review and comment, that only solid mineral processing spent material may be placed on pads rather than tanks, containers, or buildings. Solid mineral processing spent materials do not contain any free liquid. The decision-maker must affirm that pads are designed, constructed and operated to prevent significant releases of the secondary material into the environment. Pads must provide the same degree of containment afforded by the non-RCRA tanks, containers and buildings eligible for exclusion. (6/03)

(A) The decision-maker must also consider if storage on pads poses the potential for significant releases via groundwater, surface water, and air exposure pathways. Factors to be considered for

assessing the groundwater, surface water, air exposure pathways are: the volume and physical and chemical properties of the secondary material, including its potential for migration off the pad; the potential for human or environmental exposure to hazardous constituents migrating from the pad via each exposure pathway, and the possibility and extent of harm to human and environmental receptors via each exposure pathway.

(B) Pads must meet the following minimum standards: be designed of non-earthen material that is compatible with the chemical nature of the mineral processing spent material, capable of withstanding physical stresses associated with placement and removal, have run on/runoff controls, be operated in a manner which controls fugitive dust, and have integrity assurance through inspections and maintenance programs. (6/03)

(C) Before making a determination under this paragraph, the Department must provide notice and the opportunity for comment to all persons potentially interested in the determination. This can be accomplished by placing notice of this action in major local newspapers, or broadcasting notice over local radio stations.

(v) The owner or operator provides notice to the Department, providing the following information: the types of materials to be recycled; the type and location of the storage units and recycling processes; and the annual quantities expected to be placed in land-based units. This notification must be updated when there is a change in the type of materials recycled or the location of the recycling process. (8/00, 6/03)

(vi) For purposes of 261.4(a)(7) mineral processing spent materials must be the result of mineral processing and may not include any listed hazardous wastes. Listed hazardous wastes and characteristic hazardous wastes generated by non-mineral processing industries are not eligible for the conditional exclusion from the definition of solid waste. (6/03)

(18) Petrochemical recovered oil from an associated organic chemical manufacturing facility, where the oil is to be inserted into the petroleum refining process (SIC code 2911) along with normal petroleum refinery process streams, provided: (8/00)

(i) The oil is hazardous only because it exhibits the characteristic of ignitability (as defined in 261.21) and/or toxicity for benzene (261.24, waste code D018); and

(ii) The oil generated by the organic chemical manufacturing facility is not placed on the land, or speculatively accumulated before being recycled into the petroleum refining process. An "associated organic chemical manufacturing facility" is a facility where the primary SIC code is 2869, but where operations may also include SIC codes 2821, 2822, and 2865; and is physically co-located with a petroleum refinery; and

where the petroleum refinery to which the oil being recycled is returned also provides hydrocarbon feedstocks to the organic chemical manufacturing facility. "Petrochemical recovered oil" is oil that has been reclaimed from secondary materials (i.e., sludges, byproducts, or spent materials, including wastewater) from normal organic chemical manufacturing operations, as well as oil recovered from organic chemical manufacturing processes.

(19) Spent caustic solutions from petroleum refining liquid treating processes used as a feedstock to produce cresylic or naphthenic acid unless the material is placed on the land, or accumulated speculatively as defined in 261.1(c). (8/00)

(20) Hazardous secondary materials used to make zinc fertilizers, provided that the following conditions specified are satisfied: (6/04)

(i) Hazardous secondary materials used to make zinc micronutrient fertilizers must not be accumulated speculatively, as defined in 261.1(c)(8).

(ii) Generators and intermediate handlers of zinc-bearing hazardous secondary materials that are to be incorporated into zinc fertilizers must:

(A) Submit a one-time notice to the Department which contains the name, address and EPA ID number of the generator or intermediate handler facility, provides a brief description of the secondary material that will be subject to the exclusion, and identifies when the manufacturer intends to begin managing excluded, zinc-bearing hazardous secondary materials under the conditions specified in this paragraph (a)(20).

(B) Store the excluded secondary material in tanks, containers, or buildings that are constructed and maintained in a way that prevents releases of the secondary materials into the environment. At a minimum, any building used for this purpose must be an engineered structure made of non-earthen materials that provide structural support, and must have a floor, walls and a roof that prevent wind dispersal and contact with rainwater. Tanks used for this purpose must be structurally sound and, if outdoors, must have roofs or covers that prevent contact with wind and rain. Containers used for this purpose must be kept closed except when it is necessary to add or remove material, and must be in sound condition. Containers that are stored outdoors must be managed within storage areas that:

(1) have containment structures or systems sufficiently impervious to contain leaks, spills and accumulated precipitation; and

(2) provide for effective drainage and removal of leaks, spills and accumulated precipitation; and

(3) prevent run-on into the containment system.

(C) With each off-site shipment of excluded hazardous secondary materials, provide written notice to the receiving facility that the material is subject to the conditions of this paragraph (a)(20).

(D) Maintain at the generator's or intermediate handler's facility for no less than three years records of all shipments of excluded hazardous secondary materials. For each shipment these records must at a minimum contain the following information:

(1) Name of the transporter and date of the shipment;

(2) Name and address of the facility that received the excluded material, and documentation confirming receipt of the shipment; and

(3) Type and quantity of excluded secondary material in each shipment.

(iii) Manufacturers of zinc fertilizers or zinc fertilizer ingredients made from excluded hazardous secondary materials must:

(A) Store excluded hazardous secondary materials in accordance with the storage requirements for generators and intermediate handlers, as specified in paragraph (a)(20)(ii)(B) of this section.

(B) Submit a one-time notification to the Department that, at a minimum, specifies the name, address and EPA ID number of the manufacturing facility, and identifies when the manufacturer intends to begin managing excluded, zinc-bearing hazardous secondary materials under the conditions specified in this paragraph (a)(20).

(C) Maintain for a minimum of three years records of all shipments of excluded hazardous secondary materials received by the manufacturer, which must at a minimum identify for each shipment the name and address of the generating facility, name of transporter and date the materials were received, the quantity received, and a brief description of the industrial process that generated the material.

(D) Submit to the Department an annual report that identifies the total quantities of all excluded hazardous secondary materials that were used to manufacture zinc fertilizers or zinc fertilizer ingredients in the previous year, the name and address of each generating facility, and the industrial process(s) from which they were generated.

(iv) Nothing in this section preempts, overrides or otherwise negates the provision in 262.11 of this chapter, which requires any person who generates a solid waste to determine if that waste is a hazardous waste.

(v) Interim status and permitted storage units that have been used to store only zinc-bearing hazardous wastes prior to the submission of the one-time notice described in paragraph (a)(20)(ii)(A), and that afterward will be used only to store hazardous secondary materials excluded under this paragraph, are not subject to the closure requirements of 264 and 265.

(21) Zinc fertilizers made from hazardous wastes, or hazardous secondary materials that are excluded under paragraph (a)(20) of this section, provided that: (6/04)

(i) The fertilizers meet the following contaminant limits:

(A) For metal contaminants:

Constituent (6/04)	Maximum Allowable Total Concentration in Fertilizer, per Unit (1%) of Zinc (ppm)
Arsenic	0.3
Cadmium	1.4
Chromium	0.6
Lead	2.8
Mercury	0.3

(B) For dioxin contaminants the fertilizer must contain no more than eight (8) parts per trillion of dioxin, measured as toxic equivalent (TEQ).

(ii) The manufacturer performs sampling and analysis of the fertilizer product to determine compliance with the contaminant limits for metals no less than every six months, and for dioxins no less than every twelve months. Testing must also be performed whenever changes occur to manufacturing processes or ingredients that could significantly affect the amounts of contaminants in the fertilizer product. The manufacturer may use any reliable analytical method to demonstrate that no constituent of concern is present in the product at concentrations above the applicable limits. It is the responsibility of the manufacturer to ensure that the sampling and analysis are unbiased, precise, and representative of the product(s) introduced into commerce.

(iii) The manufacturer maintains for no less than three years records of all sampling and analyses performed for purposes of determining compliance with the requirements of paragraph (a)(21)(ii) of this section. Such records must at a minimum include:

(A) The dates and times product samples were taken, and the dates the samples were analyzed;

(B) The names and qualifications of the person(s) taking the samples;

(C) A description of the methods and equipment used to take the samples;

(D) The name and address of the laboratory facility at which analyses of the samples were performed;

(E) A description of the analytical methods used, including any cleanup and sample preparation methods; and

(F) All laboratory analytical results used to determine compliance with the contaminant limits specified in this paragraph (a)(21).

(22) [Reserved 6/04]

(23) [Reserved and Withdrawn 6/04]

(24) [Withdrawn 6/04]

(b) Solid wastes which are not hazardous wastes. The following solid wastes are not hazardous wastes:

(1) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel) or reused. "Household waste" means any material (including garbage, trash and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day use recreation areas). A resource recovery facility managing municipal solid waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purpose of regulation under this subtitle, if such facility (12/92; 12/93, 6/03):

(i) Receives and burns only

(A) Household waste (from single and multiple dwellings, hotels, motels, and other residential sources) and

(B) Solid waste from commercial or industrial sources that does not contain hazardous waste; and

(ii) Such facility does not accept hazardous wastes and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.

(2) Solid wastes generated by any of the following and which are returned to the soils as fertilizers:

(i) The growing and harvesting of agricultural crops.

(ii) The raising of animals, including animal manures.

(3) Mining overburden returned to the mine site if such overburden is handled in compliance with all applicable provisions of the S. C. Mining Act, Section 48-20-10 et seq., S. C. Code of Laws, 1976, as amended.

(4) Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels, except as provided by 266.112 for facilities that burn or process hazardous waste (12/92).

(5) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy.

(6) (i) Wastes which fail the test for the Toxicity Characteristic because chromium is present or are listed in subpart D due to the presence of chromium, which do not fail the test for the Toxicity Characteristic for any other constituent or are not listed due to the presence of any other constituent, and which do not fail the test for

any other characteristic, if it is shown by a waste generator or by waste generators that: (11/90)

(A) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium; and

(B) The waste is generated from an industrial process which uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and

(C) The waste is typically and frequently managed in non-oxidizing environments.

(ii) Specific wastes which meet the standard in paragraphs (b)(6)(i) (A), (B), and (C) (so long as they do not fail the test for the toxicity characteristic for any other constituent, and do not exhibit any other characteristic) are: (11/90; 12/93)

(A) Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling. (11/90; 12/92)

(B) Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(C) Buffing dust generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue.

(D) Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(E) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling. (12/92)

(F) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; and through-the-blue.

(G) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries.

(H) Wastewater treatment sludges from the production of TiO_2 pigment using chromium-bearing ores by the chloride process.

(7) Solid waste from the extraction, beneficiation, and processing of ores and minerals (including coal, phosphate rock, and overburden from the mining of

uranium ore), except as provided by 266.112 for facilities that burn or process hazardous waste.

(i) For purposes of 261.4(b)(7), beneficiation of ores and minerals is restricted to the following activities: crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briquetting; calcining to remove water and/or carbon dioxide; roasting, autoclaving, and/or chlorination in preparation for leaching (except where the roasting (and/or autoclaving and/or chlorination)/leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing); gravity concentration; magnetic separation; electrostatic separation; flotation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap, dump, vat, tank, and in situ leaching.

(ii) For the purposes of 261.4(b)(7), solid waste from the processing of ores and minerals includes only the following wastes as generated: (12/92, 11/99)

- (A) Slag from primary copper processing;
- (B) Slag from primary lead processing;
- (C) Red and brown muds from bauxite refining;
- (D) Phosphogypsum from phosphoric acid production;
- (E) Slag from elemental phosphorus production;
- (F) Gasifier ash from coal gasification;
- (G) Process wastewater from coal gasification;
- (H) Calcium sulfate wastewater treatment plant sludge from primary copper processing;
- (I) Slag tailings from primary copper processing;
- (J) Fluorogypsum from hydrofluoric acid production;
- (K) Process wastewater from hydrofluoric acid production;
- (L) Air pollution control dust/sludge from iron blast furnaces;
- (M) Iron blast furnace slag;
- (N) Treated residue from roasting/leaching of chrome ore;
- (O) Process wastewater from primary magnesium processing by the anhydrous process;
- (P) Process wastewater from phosphoric acid production;
- (Q) Basic oxygen furnace and open hearth furnace air pollution control dust/sludge from carbon steel production;
- (R) Basic oxygen furnace and open hearth furnace slag from carbon steel production;
- (S) Chloride process waste solids from titanium tetrachloride production;
- (T) Slag from primary zinc processing.

(iii) A residue derived from co-processing mineral processing secondary materials with normal beneficiation raw materials or with normal mineral processing raw materials remains excluded under paragraph (b) of this section if the owner or operator: (11/99; 8/00)

(A) Processes at least 50 percent by weight normal beneficiation raw materials or normal mineral processing raw materials; and,

(B) Legitimately reclaims the secondary mineral processing materials.

(8) Cement kiln dust waste, except as provided by 266.112 for facilities that burn or process hazardous waste (12/92).

(9) Solid waste which consists of discarded arsenical-treated wood or wood products which fails the test for the Toxicity Characteristic for Hazardous Waste Codes D004 through D017 and which is not a hazardous waste for any other reason, if the waste is generated by persons who utilize the arsenical-treated wood and wood product for these materials' intended end use. (11/90; 12/92; 12/93)

(10) Petroleum-contaminated media and debris that fail the test for the Toxicity Characteristic of section 261.24 (Hazardous Waste Codes D018 through D043 only) and are subject to the corrective action regulations under 40 CFR 280. (11/90)

(11) [Reserved]

(12) Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use (12/92).

(13) Non-terne plated used oil filters that are not mixed with wastes listed in Subpart D of this part if these oil filters have been gravity hot-drained using one of the following methods: (12/93)

- (i) Puncturing the filter anti-drain back valve or the filter dome end and hot-draining;
- (ii) Hot-draining and crushing;
- (iii) Dismantling and hot-draining; or
- (iv) Any other equivalent hot-draining method that will remove used oil.

(14) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products. (12/93)

(15) Leachate or gas condensate collected from landfills where certain solid wastes have been disposed, provided that: (8/00, 6/03)

(i) The solid wastes disposed would meet one or more of the listing descriptions for Hazardous Waste Codes K169, K170, K171, K172, K174, K175, K176, K177, and K178, if these wastes had been generated after the effective date of the listing; (6/03)

(ii) The solid wastes described in paragraph (b)(15)(i) of this section were disposed prior to the effective date of the listing;

(iii) The leachate or gas condensate do not exhibit any characteristic of hazardous waste nor are derived from any other listed hazardous waste;

(iv) Discharge of the leachate or gas condensate, including leachate or gas condensate transferred from the landfill to a POTW by truck, rail, or dedicated pipe, is subject to regulation under sections 307(b) or 402 of the Clean Water Act.

(v) As of February 13, 2001, leachate or gas condensate derived from K169-K172 is no longer exempt if it is stored or managed in a surface impoundment prior to discharge. After November 21, 2003, leachate or gas condensate derived from K176, K177, and K178 will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. There is one exception: if the surface impoundment is used to temporarily store leachate or gas condensate in response to an emergency situation (e.g., shutdown of wastewater treatment system), provided the impoundment has a double liner, and provided the leachate or gas condensate is removed from the impoundment and continues to be managed in compliance with the conditions of this paragraph after the emergency ends. (6/03)

(c) Hazardous wastes which are exempted from certain regulations. A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste-treatment-manufacturing unit, is not subject to regulation under 262 through 266, 268, 270, and 124 or to the notification requirements of South Carolina Hazardous Waste Management Act 44-56-120 and section 3010 of RCRA until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials. (11/90; 12/92)

(d) Samples.

(1) Except as provided in paragraph (d)(2) of this section, a sample of solid waste or a sample of water, soil, or air, which is collected for the sole purpose of testing to determine its characteristics or composition, is not subject to any requirements of this part or 262 through 266, 268, 270, or 124 or to the notification requirements of section 3010 of RCRA and the South Carolina Hazardous Waste Management Act 44-56-120 when: (11/90; 12/92)

(i) The sample is being transported to a laboratory for the purpose of testing; or

(ii) The sample is being transported back to the sample collector after testing; or

(iii) The sample is being stored by the sample collector before transport to a laboratory for testing; or

(iv) The sample is being stored in a laboratory before testing; or

(v) The sample is being stored in a laboratory after testing but before it is returned to the sample collector; or

(vi) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).

(2) In order to qualify for the exemption in paragraphs (d)(1) (i) and (ii) of this section, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:

(i) Comply with U.S. Department of Transportation (DOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or

(ii) Comply with the following requirements if the sample collector determines that DOT, USPS, or other shipping requirements do not apply to the shipment of the sample:

(A) Assure that the following information accompanies the sample:

(1) The sample collector's name, mailing address, and telephone number;

(2) The laboratory's name, mailing address, and telephone number;

(3) The quantity of the sample;

(4) The date of shipment; and

(5) A description of the sample.

(B) Package the sample so that it does not leak, spill, or vaporize from its packaging.

(3) This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in paragraph (d)(1) of this section.

(e) Treatability Study Samples. (11/90; 12/94)

(1) Except as provided in paragraph (e)(2) of this section, persons who generate or collect samples for the purpose of conducting treatability studies as defined in section 260.10, are not subject to any requirement of parts 261 through 263 or to the notification requirements of SC 44-56-120 and Section 3010 of RCRA, nor are such samples included in the quantity determinations of 261.5 and 262.34(d) when (12/92):

(i) The sample is being collected and prepared for transportation by the generator or sample collector; or

(ii) The sample is being accumulated or stored by the generator or sample collector prior to transportation to a laboratory or testing facility; or

(iii) The sample is being transported to the laboratory or testing facility for the purpose of conducting a treatability study.

(2) The exemption in paragraph (e)(1) of this section is applicable to samples of hazardous waste being collected and shipped for the purpose of conducting treatability studies provided that:

(i) The generator or sample collector uses (in "treatability studies") no more than 10,000 kg of media contaminated with non-acute hazardous waste, 1000 kg of non-acute hazardous waste other than contaminated media, 1 kg of acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste for each process being evaluated for each generated waste stream; and

(ii) The mass of each sample shipment does not exceed 10,000 kg; the 10,000 kg quantity may be all media contaminated with non-acute hazardous waste, or may include 2500 kg of media contaminated with acute hazardous waste, 1000 kg of hazardous waste, and 1 kg of acute hazardous waste; and

(iii) The sample must be packaged so that it will not leak, spill, or vaporize from its packaging during shipment and the requirements of paragraph A or B of this subparagraph are met.

(A) The transportation of each sample shipment complies with U.S. Department of Transportation (DOT), U.S. Postal Service (USPS), South Carolina Public Service Commission or any other applicable shipping requirements; or

(B) If the DOT, USPS, South Carolina Public Service Commission or other shipping requirements do not apply to the shipment of the sample, the following information must accompany the sample:

(1) The name, mailing address, and telephone number of the originator of the sample;

(2) The name, address, and telephone number of the facility that will perform the treatability study;

(3) The quantity of the sample;

(4) The date of shipment; and

(5) A description of the sample, including its EPA Hazardous Waste Number.

(iv) The sample is shipped to a laboratory or testing facility which is exempt under 261.4(f) or has an appropriate RCRA permit or interim status.

(v) The generator or sample collector maintains the following records for a period ending 3 years after completion of the treatability study:

(A) Copies of the shipping documents;

(B) A copy of the contract with the facility conducting the treatability study;

(C) Documentation showing:

(1) The amount of waste shipped under this exemption;

(2) The name, address, and EPA identification number of the laboratory or testing facility that received the waste;

and

(3) The date the shipment was made;

(4) Whether or not unused samples and residues were returned to the generator.

(vi) The generator reports the information required under paragraph (e)(2)(v)(C) of this section in its annual report (12/92, 9/98).

(3) The Department may grant requests on a case-by-case basis for up to an additional two years for treatability studies involving bioremediation. The Department may grant requests on a case-by-case basis for quantity limits in excess of those specified in paragraphs (e)(2)(i) and (ii) and (f)(4) of this section, for up to an additional 5000 kg of media contaminated with non-acute hazardous waste, 500 kg of non-acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste and 1 kg of acute hazardous waste;

(i) In response to requests for authorization to ship, store and conduct treatability studies on additional quantities in advance of commencing treatability studies. Factors to be considered in reviewing such requests include the nature of the technology, the type of process (e.g., batch versus continuous), size of the unit undergoing testing (particularly in relation to scale-up considerations), the time/quantity of material required to reach steady state operating conditions, or test design considerations such as mass balance calculations.

(ii) In response to requests for authorization to ship, store and conduct treatability studies on additional quantities after initiation or completion of initial treatability studies, when: There has been an equipment or mechanical failure during the conduct of a treatability study; there is a need to verify the results of a previously conducted treatability study; there is a need to study and analyze alternative techniques within a previously evaluated treatment process; or there is a need to do further evaluation of an ongoing treatability study to determine final specifications for treatment.

(iii) The additional quantities and timeframes allowed in paragraph (e)(3) (i) and (ii) of this section are subject to all the provisions in paragraphs (e)(1) and (e)(2)(iii) through (vi) of this section. The generator or sample collector must apply to the Department and provide in writing the following information:

(A) The reason why the generator or sample collector requires additional time or quantity of sample for treatability study evaluation and the additional time or quantity needed,

(B) Documentation accounting for all samples of hazardous waste from the waste stream which have been sent for or undergone treatability studies including the date each previous sample from the waste stream was shipped, the quantity of each previous shipment, the laboratory or testing facility to

which it was shipped, what treatability study processes were conducted on each sample shipped, and the available results on each treatability study;

(C) A description of the technical modifications or change in specifications which will be evaluated and the expected results;

(D) If such further study is being required due to equipment or mechanical failure, the applicant must include information regarding the reason for the failure or breakdown and also include what procedures or equipment improvements have been made to protect against further breakdowns; and

(E) Such other information that the Department considers necessary.

(f) Samples Undergoing Treatability Studies at Laboratories and Testing Facilities. Samples undergoing treatability studies and the laboratory or testing facility conducting such treatability studies (to the extent such facilities are not otherwise subject to RCRA requirements) are not subject to any requirement of this part, part 124, parts 262 through 266, 268, and 270, or to the notification requirements of SCHWMA 44-56-120 and Section 3010 of RCRA provided that the conditions of paragraphs (f) (1) through (11) of this section are met. A mobile treatment unit (MTU) may qualify as a testing facility subject to paragraphs (f) (1) through (11) of this section. Where a group of MTUs are located at the same site, the limitations specified in (f) (1) through (11) of this section apply to the entire group of MTUs collectively as if the group were one MTU. (11/90; 12/92; 12/94)

(1) No less than 45 days before conducting treatability studies, the facility notifies the Department in writing that it intends to conduct treatability studies under this paragraph.

(2) The laboratory or testing facility conducting the treatability study has an EPA identification number.

(3) No more than a total of 10,000 kg of "as received" media contaminated with non-acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste or 250 kg of other "as received" hazardous waste is subject to initiation of treatment in all treatability studies in any single day. "As received" waste refers to the waste as received in the shipment from the generator or sample collector.

(4) The quantity of "as received" hazardous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed 10,000 kg, the total of which can include 10,000 kg of media contaminated with non-acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste, 1000 kg of non-acute hazardous wastes other than contaminated media, and 1 kg of acute hazardous waste. This quantity limitation does not include treatment materials (including nonhazardous solid waste) added to "as received" hazardous waste.

(5) No more than 90 days have elapsed since the treatability study for the sample was completed, or no more than one year (two years for treatability studies involving bioremediation) have elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date first occurs. Up to 500 kg of treated material from a particular waste stream from treatability studies may be archived for future evaluation up to five years from the date of initial receipt. Quantities of materials archived are counted against the total storage limit for the facility.

(6) The treatability study does not involve the placement of hazardous waste on the land or open burning of hazardous waste.

(7) The facility maintains records for 3 years following completion of each study that show compliance with the treatment rate limits and the storage time and quantity limits. The following specific information must be included for each treatability study conducted:

(i) The name, address, and EPA identification number of the generator or sample collector of each waste sample;

(ii) The date the shipment was received;

(iii) The quantity of waste accepted;

(iv) The quantity of "as received" waste in storage each day;

(v) The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day;

(vi) The date the treatability study was concluded;

(vii) The date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated facility, the name of the facility and the EPA identification number.

(8) The facility keeps, onsite, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending 3 years from the completion date of each treatability study.

(9) The facility prepares and submits a report to the Department by March 15 of each year that estimates the number of studies and the amount of waste expected to be used in treatability studies during the current year, and includes the following information for the previous calendar year:

(i) The name, address, and EPA identification number of the facility conducting the treatability studies;

(ii) The types (by process) of treatability studies conducted;

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(iii) The names and addresses of persons for whom studies have been conducted (including their EPA identification numbers);

(iv) The total quantity of waste in storage each day;

(v) The quantity and types of waste subjected to treatability studies;

(vi) When each treatability study was conducted;

(vii) The final disposition of residues and unused sample from each treatability study.

(10) The facility determines whether any unused sample or residues generated by the treatability study are hazardous waste under 261.3 and, if so, are subject to parts 261 through 268, and part 270, unless the residues and unused samples are returned to the sample originator under the 261.4(e) exemption.

(11) The facility notifies the Department by letter when the facility is no longer planning to conduct any treatability studies at the site. (11/90)

(g) Dredged material that is not a hazardous waste. Dredged material that is subject to the requirements of a permit that has been issued under 404 of the Federal Water Pollution Control Act (33 U.S.C.1344) or section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413) is not a hazardous waste. For this paragraph (g), the following definitions apply: (8/00)

(1) The term dredged material has the same meaning as defined in 40 CFR 232.2;

(2) The term permit means:

(i) A permit issued by the U.S. Army Corps of Engineers (Corps) or an approved State under section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344);

(ii) A permit issued by the Corps under section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413); or

(iii) In the case of Corps civil works projects, the administrative equivalent of the permits referred to in paragraphs (g)(2)(i) and (ii) of this section, as provided for in Corps regulations (for example, see 33 CFR 336.1, 336.2, and 337.6).

261.5 Special requirements for hazardous waste generated by conditionally exempt small quantity generators

(a) A generator is a conditionally exempt small quantity generator in a calendar month if he generates no more than 100 kilograms of hazardous waste in that month. (6/89, 12/92)

(b) Except for those wastes identified in paragraphs (e), (f), (g), and (j) of this section, a conditionally exempt small quantity generator's hazardous wastes are not subject to regulation under 262 through 266, 268, 270 and 124, and the notification requirements of section 3010 of RCRA and the South Carolina

Hazardous Waste Management Act 44-56-60 and provided the generator complies with the requirements of paragraphs (f), (g), and (j) of this section (6/89, 11/90).

(c) When making the quantity determinations of this part and 262, the generator must include all hazardous waste that it generates, except hazardous waste that: (5/96)

(1) Is exempt from regulation under 261.4(c) through (f), 261.6(a)(3), 261.7(a)(1), or 261.8; or (5/96)

(2) Is managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in 260.10; or (5/96)

(3) Is recycled, without prior storage or accumulation, only in an on-site process subject to regulation under 261.6(c)(2); or (5/96)

(4) Is used oil managed under the requirements of 261.6(a)(4) or (5/96)

(5) Is spent lead-acid batteries managed under the requirements of 266 subpart G; or (5/96)

(6) Is universal waste managed under 261.9 and 273. (5/96)

(d) In determining the quantity of hazardous waste generated, a generator need not include:

(1) Hazardous waste when it is removed from onsite storage; or

(2) Hazardous waste produced by onsite treatment (including reclamation) of his hazardous waste, so long as the hazardous waste that is treated was counted once; or (6/89)

(3) Spent materials that are generated, reclaimed, and subsequently reused onsite, so long as such spent materials have been counted once. (6/89)

(e) If a generator generates acute hazardous waste in a calendar month in quantities greater than set forth below, all quantities of that acute hazardous waste are subject to full regulation under 262 through 266, 268, R.61-79.270 and 124 and the notification requirements of the South Carolina Hazardous Waste Management Act 44-56-120 and section 3010 of RCRA: (11/90; 12/92)

(1) A total of one kilogram of acute hazardous wastes listed in sections 261.31, 261.32, or 261.33(e).

(2) A total of 100 kilograms of any residue or contaminated soil, waste, or other debris resulting from the clean-up of a spill, into or on any land or water, of any acute hazardous wastes listed in sections 261.31, 261.32, or 261.33(e).

[Comment: "Full regulation" means those regulations applicable to generators of greater than 1,000 kg of non-acutely hazardous waste in a calendar month.] (12/93)

(f) In order for acute hazardous wastes generated by a generator of acute hazardous wastes in quantities equal to or less than those set forth in paragraph (e)(1) or (2) of this section to be excluded from full regulation

261.5 Special requirements for hazardous waste generated by conditionally exempt small quantity generators

under this section, the generator must comply with the following requirements: (11/90, 12/92)

(1) Section 262.11;

(2) The generator may accumulate acute hazardous waste onsite. If he accumulates at any time acute hazardous wastes in quantities greater than those set forth in paragraph (e)(1) or (e)(2) of this section, all of those accumulated wastes are subject to regulation under 262 through 266, 268, 270 and 124 and the applicable notification requirements of section 3010 RCRA and the applicable notification requirements of the South Carolina Hazardous Waste Management Act 44-56-120. The time period of 262.34(a) for accumulation of wastes onsite, begins when the accumulated wastes exceed the applicable exclusion limit; (11/90, 12/92)

(3) A conditionally exempt small quantity generator may either treat or dispose of his acute hazardous waste in an onsite facility or ensure delivery to an off-site treatment, storage or disposal facility, either of which, if located in the U.S., is: (6/89)

(i) Permitted under 270;

(ii) In interim status under 270 and 265;

(iii) Authorized to manage hazardous waste by a State with a hazardous waste management program approved under 40 CFR 271; (12/92)

(iv) Permitted, licensed, or registered by the Department to manage municipal solid waste and, if managed in a municipal solid waste landfill is subject to R.61-107.258; (12/92, 5/96, 9/98)

(v) Permitted, licensed, or registered by a State to manage non-municipal non-hazardous waste and, if managed in a non-municipal non-hazardous waste disposal unit after January 1, 1998, is subject to the requirements in R.61-107.257.5 through 257.30; or (9/98)

(vi) A facility which:

(A) Beneficially uses or reuses, or legitimately recycles or reclaims its waste; or

(B) Treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation; or (5/96)

(vii) For universal waste managed under part 273, a universal waste handler or destination facility subject to the requirements of 273. (5/96)

(g) In order for hazardous waste generated by a conditionally exempt small quantity generator in quantities of less than 100 kilograms of hazardous waste during a calendar month to be excluded from full regulation under this section, the generator must comply with the following requirements: (6/89)

(1) Section 262.11;

(2) The conditionally exempt small quantity generator may accumulate hazardous waste onsite. If he accumulates at any time more than a total of 1000 kilograms of his hazardous wastes, all of those accumulated wastes are subject to regulation under the

special provisions of 262 applicable to generators of between 100 kg and 1000 kg of hazardous waste in a calendar month as well as the requirements of 263 through 266, 268, and 270 and 124 and the applicable notification requirements of section 3010 of RCRA and the notification requirements of the South Carolina Hazardous Waste Management Act 44-56-120. The time period of 262.34(d) for accumulation of wastes onsite begins for a conditionally exempt small quantity generator when the accumulated wastes exceed 1000 kilograms; (11/90, 12/92)

(3) A conditionally exempt small quantity generator may either treat or dispose of his hazardous waste in an onsite facility or ensure delivery to an off-site treatment, storage or disposal facility, either of which, if located in the U.S., is:

(i) Permitted under 270;

(ii) In interim status under 270 and 265;

(iii) Authorized to manage hazardous waste by a State with a hazardous waste management program approved under 40 CFR 271 (12/92);

(iv) Permitted, licensed, or registered by the Department to manage municipal solid waste, and, if managed in a municipal solid waste landfill is subject to R.61-107.258; (6/89, 12/92; 5/96, 9/98)

(v) Permitted, licensed, or registered by the Department to manage non-municipal non-hazardous waste and, if managed in a non-municipal non-hazardous waste disposal unit after January 1, 1998, is subject to the requirements in R.61-107.257.5 through 257.30; or (9/98)

(vi) A facility which:

(A) Beneficially uses or reuses, or legitimately recycles or reclaims its waste; or

(B) Treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation; or (5/96)

(vii) For universal waste managed under part 273, a universal waste handler or destination facility subject to the requirements of 273. (5/96)

(h) Hazardous waste subject to the reduced requirements of this section may be mixed with nonhazardous waste and remain subject to these reduced requirements even though the resultant mixture exceeds the quantity limitations identified in this section, unless the mixture meets any of the characteristics of hazardous waste identified in subpart C.

(i) If any person mixes a solid waste with a hazardous waste that exceeds a quantity exclusion level of this section, the mixture is subject to full regulation. (11/90)

(j) If a conditionally exempt small quantity generator's wastes are mixed with used oil, the mixture is subject to subpart E of part 266 of this Regulation if it is destined to be burned for energy recovery. Any material produced from such a mixture by processing,

blending, or other treatment is also so regulated if it is destined to be burned for energy recovery. (6/89)

(k) [Reserved; moved to 262 12/92]

261.6 Requirements for recyclable materials

(a) (1) Hazardous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities of paragraphs (b) and (c) of this section, except for the materials listed in paragraphs (a)(2) and (a)(3) of this section. Hazardous wastes that are recycled will be known as "recyclable materials."

(2) The following recyclable materials are not subject to the requirements of this section but are regulated under subparts C through H of 266 and all applicable provisions in 270 and 124 (12/92):

(i) Recyclable materials used in a manner constituting disposal (subpart C);

(ii) Hazardous wastes burned for energy recovery in boilers and industrial furnaces that are not regulated under subpart O of 264 or 265 (Subpart H); (11/90, 12/92)

(iii) Used oil that exhibits one or more of the characteristics of hazardous waste and is burned for energy recovery in boilers and industrial furnaces that are not regulated under subpart O of 264 or 265 or E of 266); (11/90)

(iv) Recyclable materials from which precious metals are reclaimed (subpart F);

(v) Spent lead-acid batteries that are being reclaimed (subpart G).

(3) The following recyclable materials are not subject to regulation under 262 through 266, or 268, 270 or 124 and are not subject to the notification requirements of the the South Carolina Hazardous Waste Management Act 44-56-120 and 3010 RCRA(11/90, 12/92, 6/03, 6/04):

(i) Industrial ethyl alcohol that is reclaimed except that, unless provided otherwise in an international agreement as specified in 262.58:

(A) A person initiating a shipment for reclamation in a foreign country, and any intermediary arranging for the shipment, must comply with the requirements applicable to a primary exporter in sections 262.53, 262.56 (a)(1) - (4), (6), and (b), and 262.57, export such materials only upon consent of the receiving country and in conformance with the EPA Acknowledgement of Consent as defined in subpart E of 262 and provide a copy of the EPA Acknowledgement of Consent to the shipper transporting the shipment for export;(11/90)

(B) Transporters transporting a shipment for export may not accept a shipment if he knows the shipment does not conform to the EPA Acknowledgement of Consent, must ensure that a copy of the EPA Acknowledgement of Consent accompanies the shipment and must ensure that it is delivered to the facility designated by the person initiating the shipment.

261.6 Requirements for recyclable materials

(ii) Scrap metal that is not excluded under 261.4(a)(13). (10/01);

(iii) Fuels produced from the refining of oil-bearing hazardous waste along with normal process streams at a petroleum refining facility if such wastes result from normal petroleum refining, production, and transportation practices (this exemption does not apply to fuels produced from oil recovered from oil-bearing hazardous waste, where such recovered oil is already excluded under 261.4(a)(12); (10/01, 6/03)

(iv) (A) Hazardous waste fuel produced from oil-bearing hazardous wastes from petroleum refining, production, or transportation practices, or produced from oil reclaimed from such hazardous wastes, where such hazardous wastes are reintroduced into a process that does not use distillation or does not produce products from crude oil so long as the resulting fuel meets the used oil specification under R.61-79.266.40(e) and so long as no other hazardous wastes are used to produce the hazardous waste fuel; (12/92, 5/96, 6/03)

(B) Hazardous waste fuel produced from oil-bearing hazardous waste from petroleum refining production, and transportation practices, where such hazardous wastes are reintroduced into a refining process after a point at which contaminants are removed, so long as the fuel meets the used oil fuel specification under R.61-79.266.40(e); and

(C) Oil reclaimed from oil-bearing hazardous wastes from petroleum refining, production, and transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, so long as the reclaimed oil meets the used oil fuel specification under R.61-79.266.40(e); and

(v) US Filter Recovery Services XL waste (Subpart O). (6/03)

(vi) Used oil that exhibits one or more of the characteristics of hazardous waste but is recycled in some other manner than being burned for energy recovery (2/92, 8/00, 9/01 6/03)

(4) Used oil that is recycled and is also a hazardous waste solely because it exhibits a hazardous characteristic is not subject to the requirements of parts 260 through 268, but is regulated under 266 Subpart E. Used oil that is recycled includes any used oil which is reused, following its original use, for any purpose (including the purpose for which the oil was originally used). Such term includes, but is not limited to, oil which is re-refined, reclaimed, burned for energy recovery, or reprocessed. (12/93)

(5) Hazardous waste that is exported to or imported from designated member countries of the Organization for Economic Cooperation and Development (OECD) (as defined in 262.58(a)(1)) for purpose of recovery is subject to the requirements of part 262, subpart H, if it is subject to either the federal

manifesting requirements of Part 262, to the universal waste management standards of Part 273. (9/98)

(b) Generators and transporters of recyclable materials are subject to the applicable requirements of 262 and 263 of these Regulations, and the notification requirements under 44-56-120 and section 3010 of RCRA, except as provided in paragraph (a) of this section (12/92).

(c) (1) Owners and operators of facilities that store recyclable materials before they are recycled are regulated under all applicable provisions of subparts A through L, AA, BB and CC of 264 and 265, and under 266, 268, 270, and 124 and the notification requirements of section 3010 RCRA and the notification requirements of the South Carolina Hazardous Waste Management Act 44-56-120, except as provided in paragraph (a) of this section. (The recycling process itself is exempt from regulation except as provided in 261.6(d).) (11/90, 12/92, 9/98)

(2) Owners or operators of facilities that recycle recyclable materials without storing them before they are recycled are subject to the following requirements, except as provided in paragraph (a) of this section:

(i) Notification requirements under SCHWMA 44-56-120, and section 264.5 or section 265.5 and section 3010 of RCRA; (10/01)

(ii) Sections 265.71 and 265.72 (dealing with the use of the manifest and manifest discrepancies) of 265.

(iii) Section 261.6(d) (12/92).

(d) Owners or operators of facilities subject to RCRA permitting requirements with hazardous waste management units that recycle hazardous wastes are subject to the requirements of subparts AA and BB of part 264 or 265 (12/92).

261.7 Residues of hazardous waste in empty containers

(a) (1) Any hazardous waste remaining in either (i) an empty container or (ii) an inner liner removed from an empty container, as defined in paragraph (b) of this section, is not subject to regulation under 261 through 266, or 268, 124, and 270 or to the notification requirements of section 3010 RCRA and the South Carolina Hazardous Waste Management Act 44-56-120. (11/90, 12/92)

(2) Any hazardous waste in either (i) a container that is not empty or (ii) an inner liner removed from a container that is not empty, as defined in paragraph (b) of this section, is subject to regulation under 261 through 266, and 268, 124, and 270 and to the notification requirements of section 3010 RCRA and the South Carolina Hazardous Waste Management Act 44-56-120 (11/90, 12/92).

(b) (1) A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an

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acute hazardous waste listed in sections 261.31, 261.32, or 261.33(e) of this regulation, is empty if:

(i) All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, e.g., pouring, pumping, and aspirating, and

(ii) No more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner, or

(iii) (A) No more than 3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 110 gallons in size, or

(B) No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 110 gallons in size.

(2) A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches atmospheric.

(3) A container or an inner liner removed from a container that has held an acute hazardous waste listed in sections 261.31, 261.32, or 261.33(e) of this regulation is empty if:

(i) The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;

(ii) The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or

(iii) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container, has been removed.

261.8 PCB wastes regulated under Toxic Substance Control Act

The disposal of PCB-containing dielectric fluid and electric equipment containing such fluid authorized for use and regulated under 40 CFR 761 and that are hazardous only because they fail the test for the Toxicity Characteristic (Hazardous Waste Codes D018 through D043 only) are exempt from regulation under parts 261 through 265, and parts 268, 270, and 124, and the notification requirements of section 3010 of RCRA and the South Carolina Hazardous Waste Management Act 44-56-120 (11/90, 12/92)

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The wastes listed in this section are exempt from regulation under parts 262 through 270 except as specified in part 273 and, therefore are not fully regulated as hazardous waste. The wastes listed in this section are subject to regulation under 273: (5/96, 8/00)

(a) Batteries as described in 273.2;

- (b) Pesticides as described in 273.3;
- (c) Thermostats as described in 273.4 and
- (d) Lamps as described in 273.5.

Subpart B - Criteria for Identifying the Characteristics of Hazardous Waste & for Listing Hazardous Waste

261.10 Criteria for identifying the characteristics of hazardous waste

(a) The Department shall identify and define a characteristic of hazardous waste in subpart C only upon determining that (12/92):

(1) A solid waste that exhibits the characteristic may: (11/90)

(i) Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

(ii) Pose a substantial present or potential hazard to human health or the environment when it is improperly treated, stored, transported, disposed of or otherwise managed; and

(2) The characteristic can be:

(i) Measured by an available standardized test method which is reasonably within the capability of generators of solid waste or private sector laboratories that are available to serve generators of solid waste; or

(ii) Reasonably detected by generators of solid waste through their knowledge of their waste.

261.11 Criteria for listing hazardous waste

(a) The Department shall list a solid waste as a hazardous waste only upon determining that the solid waste meets one of the following criteria (12/92):

(1) It exhibits any of the characteristics of hazardous waste identified in subpart C.

(2) It has been found to be fatal to humans in low doses or, in the absence of data on human toxicity, it has been shown in studies to have an oral LD 50 toxicity (rat) of less than 50 milligrams per kilogram, an inhalation LC 50 toxicity (rat) of less than 2 milligrams per liter, or a dermal LD 50 toxicity (rabbit) of less than 200 milligrams per kilogram or is otherwise capable of causing or significantly contributing to an increase in serious irreversible, or incapacitating reversible, illness. (Waste listed in accordance with these criteria will be designated Acute Hazardous Waste.)

(3) It contains any of the toxic constituents listed in appendix VIII and, after considering the following factors, the Department concludes that the waste is capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed: (12/92)

(i) The nature of the toxicity presented by the constituent.

(ii) The concentration of the constituent in the waste.

(iii) The potential of the constituent or any toxic degradation product of the constituent to migrate from the waste into the environment under the types of improper management considered in paragraph (a)(3)(vii) of this section.

(iv) The persistence of the constituent or any toxic degradation product of the constituent.

(v) The potential for the constituent or any toxic degradation product of the constituent to degrade into non-harmful constituents and the rate of degradation.

(vi) The degree to which the constituent or any degradation product of the constituent bioaccumulates in ecosystems.

(vii) The plausible types of improper management to which the waste could be subjected.

(viii) The quantities of the waste generated at individual generation sites or on a regional or national basis.

(ix) The nature and severity of the human health and environmental damage that has occurred as a result of the improper management of wastes containing the constituent.

(x) Action taken by other governmental agencies or regulatory programs based on the health or environmental hazard posed by the waste or waste constituent.

(xi) Such other factors as may be appropriate.

Substances will be listed on Appendix VIII only if they have been shown in scientific studies to have toxic, carcinogenic, mutagenic or teratogenic effects on humans or other life forms.

(Wastes listed in accordance with these criteria will be designated Toxic wastes.)

(b) The Department list classes or types of solid waste as hazardous waste if there is reason to believe that individual wastes, within the class or type of waste, typically or frequently are hazardous under the definition of hazardous waste in Section 261.3 and found in section 1004(5) of RCRA.(10/01)

(c) The Department will use the criteria for listing specified in this section to establish the exclusion limits referred to in Section 261.5(c).

Subpart C - Characteristics of Hazardous Waste

261.20 General

(a) A solid waste, as defined in section 261.2, which is not excluded from regulation as a hazardous waste under section 261.4(b), is a hazardous waste if it exhibits any of the characteristics identified in this subpart.

[Comment: 262.11 sets forth the generators responsibility to determine whether his waste exhibits

one or more of the characteristics identified in this subpart (12/92)]

(b) A hazardous waste which is identified by a characteristic in this subpart is assigned every EPA Hazardous Waste Number that is applicable as set forth in this subpart. This number must be used in complying with the notification requirements of section 3010 of the Act and all applicable recordkeeping and reporting requirements under 262 through 266, 268, 270 and the notification requirements of the South Carolina Hazardous Waste Management Act 44-56-120 (11/90, 12/92).

(c) For purposes of this subpart, the Department will consider a sample obtained using any of the applicable sampling methods specified in Appendix I to be a representative sample within the meaning of 260.

[Comment: Since the Appendix I sampling methods are not being formally adopted by the Department, a person who desires to employ an alternative sampling method is not required to demonstrate the equivalency of his method under the procedures set forth in 260.20 and 260.21 (12/92)].

261.21 Characteristic of ignitability

(a) A solid waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:

(1) It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume and has flash point less than 60°C (140° F) as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D-93-79 or D-93-80 (incorporated by reference, see 260.11) or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D-3278-78 (incorporated by reference, see 260.11), or as determined by an equivalent test method approved by the Department under procedures set forth in 260.20 and 260.21. (11/90, 12/92)

(2) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.

(3) It is an ignitable compressed gas as defined in 49 CFR 173.300 and as determined by the test methods described in that regulation or equivalent test methods approved by the Department under 260.20 and 260.21. (12/93)

(4) It is an oxidizer as defined in 49 CFR 173.151.

(b) A solid waste that exhibits the characteristic of ignitability has the EPA Hazardous Waste Number of D001 (12/92).

261.24 Toxicity characteristic (11/90)

261.22 Characteristic of corrosivity

(a) A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has either of the following properties: (12/94)

(1) It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter using Method 9040 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in 260.11. (12/93, 9/01)

(2) It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55°C (130°F) as determined by the test method specified in NACE (National Association of Corrosion Engineers) Standard TM-01-69 as standardized in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA publication SW-846, incorporated by reference in 260.11. (12/93)

(b) A solid waste that exhibits the characteristic of corrosivity has the EPA Hazardous Waste Number of D002. (12/92)

261.23 Characteristic of reactivity

(a) A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

(1) It is normally unstable and readily undergoes violent change without detonating.

(2) It reacts violently with water.

(3) It forms potentially explosive mixtures with water.

(4) When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

(5) It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

(6) It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.

(7) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.

(8) It is a forbidden explosive as defined in 49 CFR 173.51, or a Class A explosive as defined in 49 CFR 173.53 or a Class B explosive as defined in 49 CFR 173.88.

(b) A solid waste that exhibits the characteristic of reactivity has the EPA Hazardous Waste Number of D003. (12/92)

261.24 Toxicity characteristic (11/90)

(a) A solid waste (except manufactured gas plant waste) exhibits the characteristic of toxicity if, using

the Toxicity Characteristic Leaching Procedure, test Method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in 260.11, the extract from a representative sample of the waste contains any of the contaminants listed in Table I at the concentration equal to or greater than the respective value given in that table. Where the waste contains less

than 0.5 percent filterable solids, the waste itself, after filtering using the methodology outlined in Method 1311, is considered to be the extract for the purpose of this section. (12/92, 12/93, 12/94, 6/03)

(b) A solid waste that exhibits the characteristic of toxicity has the EPA Hazardous Waste Number specified in Table I which corresponds to the toxic contaminant causing it to be hazardous (12/92).

EPA HW # ¹	Contaminant	CAS No. ²	Regulatory Level (mg/L)
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D018	Benzene	71-43-2	0.5
D006	Cadmium	7440-43-9	1.0
D019	Carbon tetrachloride	56-23-5	0.5
D020	Chlordane	57-74-9	0.03
D021	Chlorobenzene	108-90-7	100.0
D022	Chloroform	67-66-3	6.0
D007	Chromium	7440-47-3	5.0
D023	o-Cresol	95-48-7	⁴ 200.0
D024	m-Cresol	108-39-4	⁴ 200.0
D025	p-Cresol	106-44-5	⁴ 200.0
D026	Cresol	⁴ 200.0
D016	2,4-D	94-75-7	10.0
D027	1,4-Dichlorobenzene	106-46-7	7.5
D028	1,2-Dichloroethane	107-06-2	0.5
D029	1,1-Dichloroethylene	75-35-4	0.7
D030	2,4-Dinitrotoluene	121-14-2	³ 0.13
D012	Endrin	72-20-8	0.02
D031	Heptachlor (and its epoxide)	76-44-8	0.008
D032	Hexachlorobenzene	118-74-1	³ 0.13
D033	Hexachlorobutadiene	87-68-3	0.5
D034	Hexachloroethane	67-72-1	3.0
D008	Lead	7439-92-1	5.0
D013	Lindane	58-89-9	0.4
D009	Mercury	7439-97-6	0.2
D014	Methoxychlor	72-43-5	10.0
D035	Methyl ethyl ketone	78-93-3	200.0
D036	Nitrobenzene	98-95-3	2.0
D037	Pentachlorophenol	87-86-5	100.0
D038	Pyridine	110-86-1	³ 5.0
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D039	Tetrachloroethylene	127-18-4	0.7
D015	Toxaphene	8001-35-2	0.5
D040	Trichloroethylene	79-01-6	0.5
D041	2,4,5-Trichlorophenol	95-95-4	400.0
D042	2,4,6-Trichlorophenol	88-06-2	2.0
D017	2,4,5-TP (Silvex)	93-72-1	1.0
D043	Vinyl chloride	75-01-4	0.2

¹ Hazardous waste number.

² Chemical abstracts service number.

³ Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.

⁴ If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.

Subpart D - Lists of Hazardous Wastes

261.30 General

(a) A solid waste is a hazardous waste if it is listed in this subpart, unless it has been excluded from this list under 260.20 and 260.22.

(b) The Department will indicate the basis for listing the classes or types of wastes listed in this subpart by employing one or more of the following Hazard Codes: (11/90)

Ignitable Waste (I)
Corrosive Waste (C)
Reactive Waste (R)
Toxicity Characteristic (E)
Acute Hazardous Waste (H)
Toxic Waste (T)

Appendix VII identifies the constituent which caused the Department to list the waste as a Toxicity Characteristic Waste (E) or Toxic Waste (T) in sections 261.31 and 261.32.

(c) Each hazardous waste listed in this subpart is assigned an EPA Hazardous Waste Number which

261.31 Hazardous wastes from non-specific sources precedes the name of the waste. This number must be used in complying with the notification requirements of SC 44-56-120 and RCRA Section 3010 and certain recordkeeping and reporting requirements under 262 through 266, 268, and 270. (12/92)

(d) The following hazardous wastes listed in section 261.31 or 261.32 are subject to the exclusion limits for acutely hazardous wastes established in section 261.5: EPA Hazardous Wastes Numbers F020, F021, F022, F023, F026, and F027.

261.31 Hazardous wastes from non-specific sources

(a) The following solid wastes are listed hazardous wastes from non-specific sources unless they are excluded under 260.20 and 260.22 and listed in Appendix IX.

Industry & EPA HW#	261.31 Table Hazardous waste from nonspecific sources (11/90, 12/92)	Hazard code
Generic: F001	The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F002	The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1, 1, 2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvents mixtures.	(T)
F003	The following spent non-halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(I)
F004	The following spent non-halogenated solvents: Cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvents mixtures.	(T)
F005	The following spent non-halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(I, T)
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating a carbon steel; and (6) chemical etching and milling of aluminum.	(T)
F007	Spent cyanide plating bath solutions from electroplating operations.	(R, T)
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.	(R, T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.	(R, T)
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.	(R, T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.	(R, T)
F012	Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process.	(T)
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process. (12/93)	(T)

261.31 Hazardous wastes from non-specific sources

Industry & EPA HW#	261.31 Table Hazardous waste from nonspecific sources (11/90, 12/92)	Hazard code
F020	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol).	(H)
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.	(H)
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.	(H)
F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of Hexachlorophene from highly purified 2,4, 5-trichlorophenol.)	(H)
F024	Process wastes, including, but not limited to, distillation residues, heavy ends, tars, and reactor cleanout wastes from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. [This listing does not include wastewater, wastewater treatment sludges, spent catalysts, and wastes listed in Section 261.31 or 261.32]. (12/93)	(T)
F025	Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and depositions of chlorine substitution.	(T)
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.	(H)
F027	Discarded unused formulations containing tri-, tetra- or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from pre-purified 2,4,5-trichlorophenol as the sole component.).	(H)
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.	(T)
F032	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with 261.35 or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (12/93)	(T)
F034	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (12/93)	(T)
F035	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (12/93)	(T)
F037	Petroleum refinery primary oil/water/solids separation sludge-Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to: those generated in oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in 261.31(b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing. This listing does include residuals generated from processing or recycling oil-bearing hazardous secondary materials excluded under 261.4(a)(12)(i), if those residuals are to be disposed of. (8/00, 9/01)	(T)

261.32 Hazardous wastes from specific sources

Industry & EPA HW#	261.31 Table Hazardous waste from nonspecific sources (11/90, 12/92)	Hazard code
F038	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge-Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in 261.31(b)(2) (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing (12/92).	(T)
F039	Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under subpart D of this part. (Leachate resulting from the disposal of one or more of the following EPA Hazardous Wastes and no other Hazardous Wastes retains its EPA Hazardous Waste Number(s): F020, F021, F022, F023, F026, F027, and/or F028.) (12/92, 12/93).	(T)

(b) Listing Specific Definitions:

(1) For the purposes of the F037 and F038 listings, oil/water/solids is defined as oil and/or water and/or solids (12/92).

(2)(i) For the purposes of the F037 and F038 listings, aggressive biological treatment units are defined as units which employ one of the following four treatment methods: activated sludge; trickling filter; rotating biological contactor for the continuous accelerated biological oxidation of wastewaters; or high-rate aeration. High-rate aeration is a system of surface impoundments or tanks, in which intense mechanical aeration is used to completely mix the wastes, enhance biological activity, and (A) the units employs a minimum of 6 hp per million gallons of treatment volume; and either (B) the hydraulic retention time of the unit is no longer than 5 days; or (C) the hydraulic retention time is no longer than 30 days and the unit does not generate a sludge that is a hazardous waste by the Toxicity Characteristic.

(ii) Generators and treatment, storage and disposal facilities have the burden of proving that their sludges are exempt from listing as F037 and F038 wastes under this definition. Generators and treatment, storage and disposal facilities must maintain, in their operating or other onsite records, documents and data sufficient to prove that:

(A) the unit is an aggressive biological treatment unit as defined in this subsection; and

(B) the sludges sought to be exempted from the definitions of F037 and/or F038 were actually generated in the aggressive biological treatment unit. (10/01)

(3)(i) For the purposes of the F037 listing, sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement.

(ii) For the purposes of the F038 listing,

(A) sludges are considered to be generated at the moment of deposition in the unit,

where deposition is defined as at least a temporary cessation of lateral particle movement and

(B) floats are considered to be generated at the moment they are formed in the top of the unit.

261.32 Hazardous wastes from specific sources

The following solid wastes are listed hazardous wastes from specific sources unless they are excluded under 260.20 and 260.22 and listed in Appendix IX. (12/92, 5/96, 9/98, 9/01)

Industry, SC & EPA HW #	261.32 Hazardous Wastes from specific sources - Hazardous waste	Hazard code
Wood preservation:		
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.	(T)
Inorganic pigments:		
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.	(T)
K003	Wastewater treatment sludge from the production of molybdate orange pigments.	(T)
K004	Wastewater treatment sludge from the production of zinc yellow pigments.	(T)
K005	Wastewater treatment sludge from the production of chrome green pigments.	(T)
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).	(T)
K007	Wastewater treatment sludge from the production of iron blue pigments.	(T)
K008	Oven residue from the production of chrome oxide green pigments.	(T)
Organic chemicals:		
K009	Distillation bottoms from the production of acetaldehyde from ethylene.	(T)

261.32 Hazardous wastes from specific sources

K010	Distillation side cuts from the production of acetaldehyde from ethylene.	(T)
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile.	(R, T)
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile.	(R, T)
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile.	(T)
K015	Still bottoms from the distillation of benzyl chloride.	(T)
K016	Heavy ends or distillation residues from the production of carbon tetrachloride.	(T)
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.	(T)
K018	Heavy ends from the fractionation column in ethyl chloride production.	(T)
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	(T)
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.	(T)
K021	Aqueous spent antimony catalyst waste from fluoromethanes production.	(T)
K022	Distillation bottom tars from the production of phenol/acetone from cumene.	(T)
K023	Distillation light ends from the production of phthalic anhydride from naphthalene.	(T)
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene.	(T)
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	(T)
K026	Stripping still tails from the production of methy ethyl pyridines.	(T)
K027	Centrifuge and distillation residues from toluene diisocyanate production.	(R, T)
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.	(T)
K029	Waste from the product steam stripper in the production of 1,1,1-trichloroethane.	(T)
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.	(T)
K083	Distillation bottoms from aniline production.	(T)

K085	Distillation or fractionation column bottoms from the production of chlorobenzenes.	(T)
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene.	(T)
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene.	(T)
K095	Distillation bottoms from the production of 1,1,1-trichloroethane.	(T)
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.	(T)
K103	Process residues from aniline extraction from the production of aniline.	(T)
K104	Combined wastewater streams generated from nitrobenzene/aniline production.	(T)
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.	(T)
K107	Column bottoms from product separation from the production of 1,1-dimethyl-hydrazine (UDMH) from carboxylic acid hydrazines.	(C, T)
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(I, T)
K109	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(T)
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(T)
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene.	(C, T)
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)

261.32 Hazardous wastes from specific sources

K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K115	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.	(T)
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.	(T)
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K149	Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups, (This waste does not include still bottoms from the distillation of benzyl chloride.).	(T)
K150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	(T)
K151	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	(T)

K156	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.).	(T)
K157	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.).	(T)
K158	Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.).	(T)
K159	Organics from the treatment of thiocarbamate wastes	(T)
K161	Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (This listing does not include K125 or K126.).	(R, T)

261.32 Hazardous wastes from specific sources

K174	Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater), unless the sludges meet the following conditions: (i) they are disposed of in a subtitle C or non-hazardous landfill licensed or permitted by the state or federal government; (ii) they are not otherwise placed on the land prior to final disposal; and (iii) the generator maintains documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an off-site landfill. Respondents in any action brought to enforce the requirements of subtitle C must, upon a showing by the government that the respondent managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, demonstrate that they meet the terms of the exclusion set forth above. In doing so, they must provide appropriate documentation (e.g., contracts between the generator and the landfill owner/operator, invoices documenting delivery of waste to landfill, etc.) that the terms of the exclusion were met. (6/02)	(T)
K175	Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process. (6/02)	(T)
Inorganic chemicals:		
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.	(T)
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.	(T)
K106	Wastewater treatment sludge from the mercury cell process in chlorine production.	(T)

K176	Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide). (6/03)	(E)
K177	Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide). (6/03)	(T)
K178	Residues from manufacturing and manufacturing site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process. (6/03)	(T)
Pesticides:		
K031	By-product salts generated in the production of MSMA and cacodylic acid.	(T)
K032	Wastewater treatment sludge from the production of chlordane.	(T)
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.	(T)
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.	(T)
K035	Wastewater treatment sludges generated in the production of creosote.	(T)
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton.	(T)
K037	Wastewater treatment sludges from the production of disulfoton.	(T)
K038	Wastewater from the washing and stripping of phorate production.	(T)
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.	(T)
K040	Wastewater treatment sludge from the production of phorate.	(T)
K041	Wastewater treatment sludge from the production of toxaphene.	(T)
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.	(T)
K043	2,6-Dichlorophenol waste from the production of 2,4-D.	(T)
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.	(T)
K098	Untreated process wastewater from the production of toxaphene.	(T)

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K099	Untreated wastewater from the production of 2,4-D.	(T)
K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenedisithiocarbamic acid and its salt.	(T)
K124	Reactor vent scrubber water from the production of ethylenedisithiocarbamic acid and its salts.	(C, T)
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenedisithiocarbamic acid and its salts.	(T)
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenedisithiocarbamic acid and its salts.	(T)
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.	(C, T)
K132	Spent absorbent and wastewater separator solids from the production of methyl bromide.	(T)
Explosives:		
K044	Wastewater treatment sludges from the manufacturing and processing of explosives.	(R)
K045	Spent carbon from the treatment of wastewater containing explosives.	(R)
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.	(T)
K047	Pink/red water from TNT operations.	(R)
Petroleum refining:		
K048	Dissolved air flotation (DAF) float from the petroleum refining industry.	(T)
K049	Slop oil emulsion solids from the petroleum refining industry.	(T)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry.	(T)
K051	API separator sludge from the petroleum refining industry.	(T)
K052	Tank bottoms (leaded) from the petroleum refining industry.	(T)
K169	Crude oil storage tank sediment from petroleum refining operations (8/00)	(T)

K170	Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations (8/00)	(T)
K171	Spent Hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media)	(I, T)
K172	Spent Hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media.) (8/00)	(I, T)
Iron and Steel		
K061	Emission control dust/sludge from the primary production of steel in electric furnaces.	(T)
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).	(C, T)
Primary aluminum:		
K088	Spent potliners from primary aluminum reduction.	(T)
Secondary lead:		
K069	Emission control dust/sludge from secondary lead smelting. (Note: This listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further administrative action is taken. If EPA takes further action effecting this stay, EPA will publish a notice of the action in the Federal Register).	(T)
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.	(T)
Veterinary pharmaceuticals:		
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)

261.33 Discarded commercial chemical products, off-specification species, container residues, and spill residues thereof (11/90)

Ink formulation:		
K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead.	(T)
Coking:		
K060	Ammonia still lime sludge from coking operations.	(T)
K087	Decanter tank tar sludge from coking operations(6/95).	(T)
K141	Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations).	(T)
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.	(T)

K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.	(T)
K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.	(T)
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.	(T)
K147	Tar storage tank residues from coal tar refining.	(T)
K148	Residues from coal tar distillation, including but not limited to, still bottoms.	(T)
Organotins:		
K900	Waste residues from the manufacture of organotin compounds which contain tri-(organo) substituted tin compounds, to include tributyltin and its analogs. (5/02)	(T)

261.33 Discarded commercial chemical products, off-specification species, container residues, and spill residues thereof (11/90)

The following materials or items are hazardous wastes if and when they are discarded or intended to be discarded as described in section 261.2(a)(2)(i), when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment, when they are otherwise applied to the land in lieu of their original intended use or when they are contained in products that are applied to the land in lieu of their original intended use, or when, in lieu of their original intended use, they are produced for use as (or as a component of) a fuel, distributed for use as a fuel, or burned as a fuel.

(a) Any commercial chemical product, or manufacturing chemical intermediate having the generic name listed in paragraph (e) or (f) of this section.

(b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in paragraph (e) or (f) of this section. (12/92)

(c) Any residue remaining in a container or in an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in paragraph (e) or (f) of this section, unless the container is empty as defined in Section 261.7(b). (12/92).

[Comment: Unless the residue is being beneficially used or reused, or legitimately recycled or reclaimed; or being accumulated, stored, transported or treated prior to such use, reuse, recycling or reclamation, the Department considers the residue to be intended for discard, and thus, a hazardous waste. An example of a legitimate reuse of the residue would be where the residue remains in the container and the container is used to hold the same commercial chemical product or manufacturing chemical intermediate it previously held. An example of the discard of the residue would be where the drum is sent to a drum reconditioner who reconditions the drum but discards the residue (12/92).]

(d) Any residue or contaminated soil, water or other debris resulting from the cleanup of a spill into or on any land or water of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in paragraph (e) or (f) of this section, or any residue or contaminated soil, water or other debris resulting from the cleanup of a spill, into or on any land or water, of any off-specification chemical product and manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in paragraph (e) or (f) of this section.

[Comment: The phrase "commercial chemical product or manufacturing chemical intermediate having the generic name listed in . . ." refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical

261.33(e) Lists of Acute Hazardous Wastes

grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. It does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in paragraph (e) or (f). Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in paragraph (e) or (f), such waste will be listed in either sections 261.31 or 261.32 or will be identified as a hazardous waste by the characteristics set forth in subpart C of this part. (12/92)].

(e) The commercial chemical products, manufacturing chemical intermediates or off-

specification commercial chemical products or manufacturing chemical intermediates referred to in paragraphs (a) through (d) of this section, are identified as acute hazardous wastes (H) and are subject to the small quantity exclusion defined in section 261.5(e).

[Comment: For the convenience of the regulated community the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound only is listed for acute toxicity (12/92, 12/93).]

These wastes and their corresponding EPA Hazardous Waste Numbers are:

HW #	Chemical abstracts #	261.33(e) Lists of Acute Hazardous Wastes Substance (11/90, 12/92, 5/96)
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P070	116-06-3	Aldicarb
P203	1646-88-4	Aldicarb sulfone.(5/96)
P004	309-00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine
P009	131-74-8	Ammonium picrate (R)
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate(1-), bis(cyano-C-), potassium
P010	7778-39-4	Arsenic acid H ₃ AsO ₄
P012	1327-53-3	Arsenic oxide As ₂ O ₃
P011	1303-28-2	Arsenic oxide As ₂ O ₅
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide
P038	692-42-2	Arsine, diethyl-
P036	696-28-6	Arsonous dichloride, phenyl-
P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl-
P013	542-62-1	Barium cyanide
P024	106-47-8	Benzenamine, 4-chloro-
P077	100-01-6	Benzenamine, 4-nitro-
P028	100-44-7	Benzene, (chloromethyl)
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl-], (R)
P046	122-09-8	Benzeneethanamine, alpha, alpha-dimethyl-
P014	108-98-5	Benzenethiol
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate.(5/96)
P188	57-64-7	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1, 3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1). (5/96)
P001	¹ 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium powder
P017	598-31-2	Bromoacetone
P018	357-57-3	Brucine
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)- O-[(methylamino)carbonyl]oxime
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide Ca(CN) ₂

HW #	Chemical abstracts #	261.33(e) Lists of Acute Hazardous Wastes
		Substance (11/90, 12/92, 5/96)
P022	75-15-0	Carbon disulfide
P189	55285-14-8	Carbamic acid, [(dibutylamino)- thio]methyl-, 2,3-dihydro-2,2-dimethyl- 7-benzofuranyl ester (5/96)
P191	644-64-4	Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]- 5-methyl-1H- pyrazol-3-yl ester. (5/96)
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H- pyrazol-5-yl ester.(5/96)
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester. (5/96)
P127	1563-66-2	Carbofuran. (5/96)
P095	75-44-5	Carbonic dichloride
P189	55285-14-8	Carbosulfan. (5/96)
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P027	542-76-7	3-Chloropropionitrile
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide Cu(CN)
P202	64-00-6	m-Cumenyl methylcarbamate.(5/96)
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a-, hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta,8abeta)-
P037	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6, 6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha, 7beta,7aalpha)-
P051	¹ 72-20-8	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6, 6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta, 7beta,7aalpha)-, & metabolites
P044	60-51-5	Dimethoate
P191	644-64-4	Dimetilan.(5/96)
P046	122-09-8	alpha,alpha-Dimethylphenethylamine
P047	¹ 534-52-1	4,6-Dinitro-o-cresol, & salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-85-7	Dinoseb
P085	152-16-9	Diphosphoramidate, octamethyl-
P111	107-49-3	Diphosphoric acid, tetraethyl ester
P039	298-04-4	Disulfoton
P049	541-53-7	Dithiobiuret
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O- [(methylamino)- carbonyl]oxime. (5/96)
P050	115-29-7	Endosulfan
P088	145-73-3	Endothall
P051	72-20-8	Endrin
P051	72-20-8	Endrin, & metabolites
P042	51-43-4	Epinephrine
P031	460-19-5	Ethanedinitrile
P194	23135-22-0	Ethanimidothioc acid, 2- (dimethylamino)-N-[[[(methylamino)carbonyl]oxy]-2-oxo-, methyl ester.(5/96)
P066	16752-77-5	Ethanimidothioic acid, N-[[[(methylamino)carbonyl]oxy]-, methyl ester
P101	107-12-0	Ethyl cyanide
P054	151-56-4	Ethyleneimine
P097	52-85-7	Famphur
P056	7782-41-4	Fluorine
P057	640-19-7	Fluoroacetamide
P198	23422-53-9	Formetanate hydrochloride. (5/96)
P197	17702-57-7	Formparanate. (5/96)

HW #	Chemical abstracts #	261.33(e) Lists of Acute Hazardous Wastes Substance (11/90, 12/92, 5/96)
P058	62-74-8	Fluoroacetic acid, sodium salt
P065	628-86-4	Fulminic acid, mercury(2+) salt (R,T)
P059	76-44-8	Heptachlor
P062	757-58-4	Hexaethyl tetraphosphate
P116	79-19-6	Hydrazinecarbothioamide
P068	60-34-4	Hydrazine, methyl-
P063	74-90-8	Hydrocyanic acid
P063	74-90-8	Hydrogen cyanide
P096	7803-51-2	Hydrogen phosphide
P060	465-73-6	Isodrin
P192	119-38-0	Isolan. (5/96)
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate.(5/96)
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-, (5/96)
P196	15339-36-3	Manganese dimethyldithiocarbamate. (5/96)
P092	62-38-4	Mercury, (acetato-O)phenyl-
P065	628-86-4	Mercury fulminate (R,T)
P082	62-75-9	Methanamine, N-methyl-N-nitroso-
P064	624-83-9	Methane, isocyanato-
P016	542-88-1	Methane, oxybis[chloro-
P112	509-14-8	Methane, tetranitro- (R)
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-[3-[(methylamino)-carbonyl]oxy]phenyl]-, monohydrochloride (5/96)
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[(methylamino)carbonyl]oxy]phenyl]- (5/96)
P199	2032-65-7	Methiocarb. (5/96)
P118	75-70-7	Methanethiol, trichloro-
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10- hexachloro-1,5,5a,6, 9,9a-hexahydro-,3-oxide
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P066	16752-77-5	Methomyl
P068	60-34-4	Methyl hydrazine
P064	624-83-9	Methyl isocyanate
P069	75-86-5	2-Methylactonitrile
P071	298-00-0	Methyl parathion
P190	1129-41-5	Metolcarb. (5/96)
P128	315-18-4	Mexacarbate. (4/96)
P072	86-88-4	alpha-Naphthylthiourea
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl Ni(CO) ₄ , (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cyanide Ni(CN) ₂
P075	154-11-5	Nicotine, & salts
P076	10102-43-9	Nitric oxide
P077	100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P076	10102-43-9	Nitrogen oxide NO
P078	10102-44-0	Nitrogen oxide NO ₂
P081	55-63-0	Nitroglycerine (R)
P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P085	152-16-9	Octamethylpyrophosphoramide
P087	20816-12-0	Osmium oxide OsO ₄ , (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P194	23135-22-0	Oxamyl. (5/96)
P089	56-38-2	Parathion
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P048	51-28-5	Phenol, 2,4-dinitro
P047	1534-52-1	Phenol, 2-methyl-4,6-dinitro, & salts
P020	88-85-7	Phenol, 2-(1-methylpropyl)4,6-dinitro-
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-,methylcarbamate (ester). (5/96)

HW #	Chemical abstracts #	261.33(e) Lists of Acute Hazardous Wastes Substance (11/90, 12/92, 5/96)
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate (5/96)
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate. (5/96)
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate. (5/96)
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P094	298-02-2	Phorate
P095	75-44-5	Phosgene
P096	7803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl]ester
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl]ester
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester
P071	298-00-0	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester
P204	57-47-6	Physostigmine. (5/96)
P188	57-64-7	Physostigmine salicylate. (5/96)
P110	78-00-2	Plumbane, tetraethyl-
P098	151-50-8	Potassium cyanide
P098	151-50-8	Potassium cyanide K (CN)
P099	506-61-6	Potassium silver cyanide
P201	2631-37-0	Promecarb (5/96)
P203	1646-88-4	Propanal,2-methyl-2-(methyl-sulfonyl)-,O-[(methylamino)carbonyl] oxime. (5/96)
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P101	107-12-0	Propanenitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)
P017	598-31-2	2-Propanone, 1-bromo-
P102	107-19-7	Propargyl alcohol
P003	107-02-8	2-Propenal
P005	107-18-6	2-Propen-1-ol
P067	75-55-8	1,2 Propylenimine
P102	107-19-7	2-Propyn-1-ol
P008	504-24-5	4-Pyridinamine
P075	¹ 54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts
P204	57-47-6	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)- (5/96)
P114	12039-52-0	Selenious acid, dithallium(1+) salt
P103	630-10-4	Selenourea
P104	506-64-9	Silver cyanide
P104	506-64-9	Silver cyanide Ag (CN)
P105	26628-22-8	Sodium azide
P106	143-33-9	Sodium cyanide
P106	143-33-9	Sodium cyanide Na (CN)
P108	¹ 57-24-9	Strychnidin-10-one, & salts
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	¹ 57-24-9	Strychnine, & salts
P115	7446-18-6	Sulfuric acid, dithallium(1+) salt
P109	3689-24-5	Tetraethyldithiopyrophosphate
P110	78-00-2	Tetraethyl lead
P111	107-49-3	Tetraethyl pyrophosphate
P112	509-14-8	Tetranitromethane (R)
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester
P113	1314-32-5	Thallic oxide
P113	1314-32-5	Thallium oxide Tl ₂ O ₃
P114	12039-52-0	Thallium(I) selenite
P115	7446-18-6	Thallium(I) sulfate
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester

HW #	Chemical abstracts #	261.33(e) Lists of Acute Hazardous Wastes
		Substance (11/90, 12/92, 5/96)
P045	39196-18-4	Thiofanox
P049	541-53-7	Thioimidodicarbonic diamide [(H ₂ N)C(S)] ₂ NH
P014	108-98-5	Thiophenol
P116	79-19-6	Thiosemicarbazide
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P072	86-88-4	Thiourea, 1-naphthalenyl-
P093	103-85-5	Thiourea, phenyl-
P185	26419-73-8	Tirpate. (5/96)
P123	8001-35-2	Toxaphene
P118	75-70-7	Trichloromethanethiol
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide V ₂ O ₅
P120	1314-62-1	Vanadium pentoxide
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	¹ 81-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-, (5/96)
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide Zn(CN) ₂
P122	1314-84-7	Zinc phosphide Zn ₃ P ₂ , when present at concentrations greater than 10% (R,T)
P205	137-30-4	Ziram. (5/96)

FOOTNOTE: ¹CAS Number given for parent compound only.

(f) The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products referred to in paragraphs (a) through (d) of this section, are identified as toxic wastes (T), unless otherwise designated and are subject to the small quantity generator exclusion defined in Section 261.5 (a) and (g). (5/96)

[Comment: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability) and C (Corrosivity). Absence of a letter indicates that the compound is only listed for toxicity (12/92; 5/96).]

These wastes and their corresponding EPA Hazardous Waste Numbers are:

261.33(f) Lists of Subpart D Toxic Hazardous Wastes		
HW #	CAS#	Substance (11/90; 12/92; 12/93; 5/96, 9/98)
U394	30558-43-1	A2213 (5/96)
U001	75-07-0	Acetaldehyde (I)
U034	75-87-6	Acetaldehyde, trichloro-
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl-
U240	¹ 94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U112	141-78-6	Acetic acid ethyl ester (I)
U144	301-04-2	Acetic acid, lead(2+) salt
U214	563-68-8	Acetic acid, thallium(1+) salt
see F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
U002	67-64-1	Acetone (I)
U003	75-05-8	Acetonitrile (I,T)
U004	98-86-2	Acetophenone
U005	53-96-3	2-Acetylaminofluorene
U006	75-36-5	Acetyl chloride (C,R,T)
U007	79-06-1	Acrylamide
U008	79-10-7	Acrylic acid (I)
U009	107-13-1	Acrylonitrile
U011	61-82-5	Amitrole
U012	62-53-3	Aniline (I,T)
U136	75-60-5	Arsinic acid, dimethyl-
U014	492-80-8	Auramine
U015	115-02-6	Azaserine
U010	50-07-7	Azirino[2',3':3,4]pyrrolo(1,2-a)indole-4,7- dione, 6-amino-8-[[aminocarbonyl]oxy]methyl]-1,1a,2,8,8a,8b- hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha, 8beta, 8aalpha, 8balph)]-
U280	101-27-9	Barban. (5/96)
U278	22781-23-3	Bendiocarb. (5/96)

261.33(f) Lists of Subpart D Toxic Hazardous Wastes		
HW #	CAS#	Substance (11/90; 12/92; 12/93; 5/96, 9/98)
U364	22961-82-6	Bendiocarb phenol. (5/96)
U271	17804-35-2	Benomyl. (5/96)
U157	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U016	225-51-4	Benz[c]acridine
U017	98-87-3	Benzal chloride
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U018	56-55-3	Benz[a]anthracene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	95-53-4	Benzenamine, 2-methyl-
U353	106-49-0	Benzenamine, 4-methyl-
U158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U019	71-43-2	Benzene (I,T)
U038	510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U037	108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U070	95-50-1	Benzene, 1,2-dichloro-
U071	541-73-1	Benzene, 1,3-dichloro-
U072	106-46-7	Benzene, 1,4-dichloro-
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-
U017	98-87-3	Benzene, (dichloromethyl)-
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl- (R,T)
U239	1330-20-7	Benzene, dimethyl- (I,T)
U201	108-46-3	1,3-Benzenediol
U127	118-74-1	Benzene, hexachloro-
U056	110-82-7	Benzene, hexahydro- (I)
U220	108-88-3	Benzene, methyl-
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U055	98-82-8	Benzene, (1-methylethyl)- (I)
U169	98-95-3	Benzene, nitro-
U183	608-93-5	Benzene, pentachloro-
U185	82-68-8	Benzene, pentachloronitro-
U020	98-09-9	Benzenesulfonic acid chloride (C,R)
U020	98-09-9	Benzenesulfonyl chloride (C,R)
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-
U023	98-07-7	Benzene, (trichloromethyl)-
U234	99-35-4	Benzene, 1,3,5-trinitro-
U021	92-87-5	Benzydine
U202	¹ 81-07-2	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts
U278	22781-23-3	1,3-Benzodioxol-4ol, 2,2dimethyl, methyl carbamate. (5/96)
U364	22961-82-6	1,3-Benzodioxol-4ol, 2,2dimethyl,
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl (5/96)
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U064	189-55-9	Benzo[rst]pentaphene

261.33(f) Lists of Subpart D Toxic Hazardous Wastes		
HW #	CAS#	Substance (11/90; 12/92; 12/93; 5/96, 9/98)
U248	¹ 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl- butyl)-, & salts, when present at concentrations of 0.3% or less
U022	50-32-8	Benzo[a]pyrene
U197	106-51-4	p-Benzoquinone
U023	98-07-7	Benzotrichloride (C,R,T)
U085	1464-53-5	2,2'-Bioxirane
U021	92-87-5	[1,1'-Biphenyl]-4,4'-diamine
U073	91-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-
U091	119-90-4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U095	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U225	75-25-2	Bromoform
U030	101-55-3	4-Bromophenyl phenyl ether
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U031	71-36-3	1-Butanol (I)
U159	78-93-3	2-Butanone (I,T)
U160	1338-23-4	2-Butanone, peroxide (R,T)
U053	4170-30-3	2-Butenal
U074	764-41-0	2-Butene, 1,4-dichloro- (I,T)
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1- oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H- pyrrolizin-1-yl ester,... [1S-[1alpha(Z),7(2S*,3R*),7aalpha]]-
U031	71-36-3	n-Butyl alcohol (I)
U136	75-60-5	Cacodylic acid
U032	13765-19-0	Calcium chromate
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methyl
U271	17804-35-2	Carbamic acid, [1-[(butylamino)carbonyl]-1H- benzimidazol-2-yl]-, methyl ester. (5/96)
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2- butynyl ester. (5/96)
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester.
U409	23564-05-8	Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl)]bis-, dimethyl ester. (5/96)
U238	51-79-6	Carbamic acid, ethyl ester
U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester
U097	79-44-7	Carbamic chloride, dimethyl-
U114	¹ 111-54-6	Carbamodithioic acid, 1,2-ethanediybis-, salts & esters
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester. (5/96)
U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester. (5/96)
U279	63-25-2	Carbaryl. (5/96)
U372	10605-21-7	Carbendazim. (5/96)
U367	1563-38-8	Carbofuran phenol. (5/96)
U215	6533-73-9	Carbonic acid, dithallium(1+) salt
U033	353-50-4	Carbonic difluoride
U156	79-22-1	Carbonochloridic acid, methyl ester (I, T)
U033	353-50-4	Carbon oxyfluoride (R, T)
U211	56-23-5	Carbon tetrachloride
U034	75-87-6	Chloral
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, alpha & gamma isomers
U026	494-03-1	Chlornaphazin
U037	108-90-7	Chlorobenzene
U038	510-15-6	Chlorobenzilate
U039	59-50-7	p-Chloro-m-cresol
U042	110-75-8	2-Chloroethyl vinyl ether
U044	67-66-3	Chloroform
U046	107-30-2	Chloromethyl methyl ether
U047	91-58-7	beta-Chloronaphthalene
U048	95-57-8	o-Chlorophenol
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride
U032	13765-19-0	Chromic acid H ₂ CrO ₄ , calcium salt
U050	218-01-9	Chrysene
U051	----	Creosote
U052	1319-77-3	Cresol (Cresylic acid)

261.33(f) Lists of Subpart D Toxic Hazardous Wastes		
HW #	CAS#	Substance (11/90; 12/92; 12/93; 5/96, 9/98)
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Cumene (I)
U246	506-68-3	Cyanogen bromide (CN)Br
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U056	110-82-7	Cyclohexane (I)
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)-
U057	108-94-1	Cyclohexanone (I)
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	50-18-0	Cyclophosphamide
U240	¹ 94-75-7	2,4-D, salts & esters
U059	20830-81-3	Daunomycin
U060	72-54-8	DDD
U061	50-29-3	DDT
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz[a,h]anthracene
U064	189-55-9	Dibenzo[a,i]pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U069	84-74-2	Dibutyl phthalate
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	3,3'-Dichlorobenzidine
U074	764-41-0	1,4-Dichloro-2-butene (I, T)
U075	75-71-8	Dichlorodifluoromethane
U078	75-35-4	1,1-Dichloroethylene
U079	156-60-5	1,2-Dichloroethylene
U025	111-44-4	Dichloroethyl ether
U027	108-60-1	Dichloroisopropyl ether
U024	111-91-1	Dichloromethoxy ethane
U081	120-83-2	2,4-Dichlorophenol
U082	87-65-0	2,6-Dichlorophenol
U084	542-75-6	1,3-Dichloropropene
U085	1464-53-5	1,2:3,4-Diepoxybutane (I, T)
U108	123-91-1	1,4-Diethyleneoxide
U028	117-81-7	Diethylhexyl phthalate
U395	5952-26-1	Diethylene glycol, dicarbamate. (5/96)
U086	1615-80-1	N,N'-Diethylhydrazine
U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate
U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbesterol
U090	94-58-6	Dihydrosafrole
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	7,12-Dimethylbenz[a]anthracene
U095	119-93-7	3,3'-Dimethylbenzidine
U096	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U097	79-44-7	Dimethylcarbamoyl chloride
U098	57-14-7	1,1-Dimethylhydrazine
U099	540-73-8	1,2-Dimethylhydrazine
U101	105-67-9	2,4-Dimethylphenol
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Dioxane
U109	122-66-7	1,2-Diphenylhydrazine
U110	142-84-7	Dipropylamine (I)
U111	621-64-7	Di-n-propylnitrosamine
U041	106-89-8	Epichlorohydrin

261.33(f) Lists of Subpart D Toxic Hazardous Wastes		
HW #	CAS#	Substance (11/90; 12/92; 12/93; 5/96, 9/98)
U001	75-07-0	Ethanal (I)
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
U404	121-44-8	Ethanamine, N,N-diethyl- (5/96)
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2- pyridinyl-N'-(2-thienylmethyl)-
U067	106-93-4	Ethane, 1,2-dibromo-
U076	75-34-3	Ethane, 1,1-dichloro-
U077	107-06-2	Ethane, 1,2-dichloro-
U131	67-72-1	Ethane, hexachloro-
U024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U117	60-29-7	Ethane, 1,1'-oxybis-(I)
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-
U184	76-01-7	Ethane, pentachloro-
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U218	62-55-5	Ethanethioamide
U226	71-55-6	Ethane, 1,1,1-trichloro-
U227	79-00-5	Ethane, 1,1,2-trichloro-
U410	59669-26-0	Ethanimidothioic acid, N,N'-[thiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester (5/96)
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino)-N- hydroxy-2-oxo-, methyl ester.
U359	110-80-5	Ethanol, 2-ethoxy-
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U395	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate. (5/96)
U004	98-86-2	Ethanone, 1-phenyl-
U043	75-01-4	Ethene, chloro-
U042	110-75-8	Ethene, (2-chloroethoxy)-
U078	75-35-4	Ethene, 1,1-dichloro-
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-
U210	127-18-4	Ethene, tetrachloro-
U228	79-01-6	Ethene, trichloro-
U112	141-78-6	Ethyl acetate (I)
U113	140-88-5	Ethyl acrylate (I)
U238	51-79-6	Ethyl carbamate (urethane)
U117	60-29-7	Ethyl ether (I)
U114	¹ 111-54-6	Ethylenebisdithiocarbamic acid, salts & esters
U067	106-93-4	Ethylene dibromide
U077	107-06-2	Ethylene dichloride
U359	110-80-5	Ethylene glycol monoethyl ether
U115	75-21-8	Ethylene oxide (I, T)
U116	96-45-7	Ethylenethiourea
U076	75-34-3	Ethylidene dichloride
U118	97-63-2	Ethyl methacrylate
U119	62-50-0	Ethyl methanesulfonate
U120	206-44-0	Fluoranthene
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C, T)
U124	110-00-9	Furan (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U147	108-31-6	2,5-Furandione
U213	109-99-9	Furan, tetrahydro-(I)
U125	98-01-1	Furfural (I)
U124	110-00-9	Furfuran (I)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3- nitrosoureido)-, D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-[[[(methylnitrosoamino)- carbonyl]amino]-
U126	765-34-4	Glycidylaldehyde
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	Hexachlorobutadiene
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene
U243	1888-71-7	Hexachloropropene

261.33(f) Lists of Subpart D Toxic Hazardous Wastes		
HW #	CAS#	Substance (11/90; 12/92; 12/93; 5/96, 9/98)
U133	302-01-2	Hydrazine (R, T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U098	57-14-7	Hydrazine, 1,1-dimethyl-
U099	540-73-8	Hydrazine, 1,2-dimethyl-
U109	122-66-7	Hydrazine, 1,2-diphenyl-
U134	7664-39-3	Hydrofluoric acid (C, T)
U134	7664-39-3	Hydrogen fluoride (C, T)
U135	7783-06-4	Hydrogen sulfide
U135	7783-06-4	Hydrogen sulfide H ₂ S
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U116	96-45-7	2-Imidazolidinethione
U137	193-39-5	Indeno[1,2,3-cd]pyrene
U190	85-44-9	1,3-Isobenzofurandione
U140	78-83-1	Isobutyl alcohol (I, T)
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
U143	303-34-4	Lasiocarpine
U144	301-04-2	Lead acetate
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U145	7446-27-7	Lead phosphate
U146	1335-32-6	Lead subacetate
U129	58-89-9	Lindane
U163	70-25-7	MNNG
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazide
U149	109-77-3	Malononitrile
U150	148-82-3	Melphalan
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile (I, T)
U092	124-40-3	Methanamine, N-methyl- (I)
U029	74-83-9	Methane, bromo-
U045	74-87-3	Methane, chloro- (I, T)
U046	107-30-2	Methane, chloromethoxy-
U068	74-95-3	Methane, dibromo-
U080	75-09-2	Methane, dichloro-
U075	75-71-8	Methane, dichlorodifluoro-
U138	74-88-4	Methane, iodo-
U119	62-50-0	Methanesulfonic acid, ethyl ester
U211	56-23-5	Methane, tetrachloro-
U153	74-93-1	Methanethiol (I, T)
U225	75-25-2	Methane, tribromo-
U044	67-66-3	Methane, trichloro-
U121	75-69-4	Methane, trichlorofluoro-
U036	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8- octachloro-2,3,3a,4,7,7a-hexahydro-
U154	67-56-1	Methanol (I)
U155	91-80-5	Methapyrilene
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2- one, 1,1a,3,3a,4,5,5,5a,5b,6- decachlorooctahydro-
U247	72-43-5	Methoxychlor
U154	67-56-1	Methyl alcohol (I)
U029	74-83-9	Methyl bromide
U186	504-60-9	1-Methylbutadiene (I)
U045	74-87-3	Methyl chloride (I, T)
U156	79-22-1	Methyl chlorocarbonate (I, T)
U226	71-55-6	Methyl chloroform
U157	56-49-5	3-Methylcholanthrene
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U068	74-95-3	Methylene bromide
U080	75-09-2	Methylene chloride
U159	78-93-3	Methyl ethyl ketone (MEK) (I, T)
U160	1338-23-4	Methyl ethyl ketone peroxide (R, T)
U138	74-88-4	Methyl iodide

261.33(f) Lists of Subpart D Toxic Hazardous Wastes		
HW #	CAS#	Substance (11/90; 12/92; 12/93; 5/96, 9/98)
U161	108-10-1	Methyl isobutyl ketone (I)
U162	80-62-6	Methyl methacrylate (I, T)
U161	108-10-1	4-Methyl-2-pentanone (I)
U164	56-04-2	Methylthiouracil
U010	50-07-7	Mitomycin C
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-[(3- amino-2,3,6-trideoxy)-alpha-L-lyxo- hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U167	134-32-7	1-Naphthalenamine
U168	91-59-8	2-Naphthalenamine
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U165	91-20-3	Naphthalene
U047	91-58-7	Naphthalene, 2-chloro-
U166	130-15-4	1,4-Naphthalenedione
U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'- dimethyl[1,1'-biphenyl]-4,4'- diyl)bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt
U279	63-25-2	1-Naphthalenol, methylcarbamate. (5/96)
U166	130-15-4	1,4-Naphthoquinone
U167	134-32-7	alpha-Naphthylamine
U168	91-59-8	beta-Naphthylamine
U217	10102-45-1	Nitric acid, thallium(1+) salt
U169	98-95-3	Nitrobenzene (I, T)
U170	100-02-7	p-Nitrophenol
U171	79-46-9	2-Nitropropane (I, T)
U172	924-16-3	N-Nitrosodi-n-butylamine
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	N-Nitrosodiethylamine
U176	759-73-9	N-Nitroso-N-ethylurea
U177	684-93-5	N-Nitroso-N-methylurea
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine
U180	930-55-2	N-Nitrosopyrrolidine
U181	99-55-8	5-Nitro-o-toluidine
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N- bis(2-chloroethyl)tetrahydro-, 2-oxide
U115	75-21-8	Oxirane (I, T)
U126	765-34-4	Oxiranecarboxyaldehyde
U041	106-89-8	Oxirane, (chloromethyl)-
U182	123-63-7	Paraldehyde
U183	608-93-5	Pentachlorobenzene
U184	76-01-7	Pentachloroethane
U185	82-68-8	Pentachloronitrobenzene (PCNB)
See F027	87-86-5	Pentachlorophenol
U161	108-10-1	Pentanol, 4-methyl-
U186	504-60-9	1,3-Pentadiene (I)
U187	62-44-2	Phenacetin
U188	108-95-2	Phenol
U048	95-57-8	Phenol, 2-chloro-
U039	59-50-7	Phenol, 4-chloro-3-methyl-
U081	120-83-2	Phenol, 2,4-dichloro-
U082	87-65-0	Phenol, 2,6-dichloro-
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U101	105-67-9	Phenol, 2,4-dimethyl-
U052	1319-77-3	Phenol, methyl-
U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate. (5/96)
U170	100-02-7	Phenol, 4-nitro-
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	95-95-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-

261.33(f) Lists of Subpart D Toxic Hazardous Wastes		
HW #	CAS#	Substance (11/90; 12/92; 12/93; 5/96, 9/98)
U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U189	1314-80-3	Phosphorus sulfide (R)
U190	85-44-9	Phthalic anhydride
U191	109-06-8	2-Picoline
U179	100-75-4	Piperidine, 1-nitroso-
U192	23950-58-5	Pronamide
U194	107-10-8	1-Propanamine (I, T)
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-
U110	142-84-7	1-Propanamine, N-propyl- (I)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U083	78-87-5	Propane, 1,2-dichloro-
U149	109-77-3	Propanedinitrile
U171	79-46-9	Propane, 2-nitro- (I, T)
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-
U193	1120-71-4	1,3-Propane sultone
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U140	78-83-1	1-Propanol, 2-methyl- (I, T)
U002	67-64-1	2-Propanone (I)
U007	79-06-1	2-Propenamide
U084	542-75-6	1-Propene, 1,3-dichloro-
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	107-13-1	2-Propenenitrile
U152	126-98-7	2-Propenenitrile, 2-methyl- (I, T)
U008	79-10-7	2-Propenoic acid (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I, T)
U373	112-42-9	Propam. (5/96)
U411	114-26-1	Propoxur. (5/96)
U194	107-10-8	n-Propylamine (I, T)
U083	78-87-5	Propylene dichloride
U387	52888-80-9	Prosulfocarb. (5/96)
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U196	110-86-1	Pyridine
U191	109-06-8	Pyridine, 2-methyl-
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-
U164	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thio-
U180	930-55-2	Pyrrolidine, 1-nitroso-
U200	50-55-5	Reserpine
U201	108-46-3	Resorcinol
U202	181-07-2	Saccharin, & salts
U203	94-59-7	Safrole
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide
U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide SeS ₂ (R, T)
U015	115-02-6	L-Serine, diazoacetate (ester)
See F027	93-72-1	Silvex (2,4,5-TP)
U206	18883-66-4	Streptozotocin
U103	77-78-1	Sulfuric acid, dimethyl ester
U189	1314-80-3	Sulfur phosphide (R)
See F027	93-76-5	2,4,5-T
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Tetrachloroethylene
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
U213	109-99-9	Tetrahydrofuran (I)
U214	563-68-8	Thallium(I) acetate

261.35 Deletion of certain hazardous waste codes following equipment cleaning and replacement

261.33(f) Lists of Subpart D Toxic Hazardous Wastes		
HW #	CAS#	Substance (11/90; 12/92; 12/93; 5/96, 9/98)
U215	6533-73-9	Thallium(I) carbonate
U216	7791-12-0	Thallium(I) chloride
U216	7791-12-0	Thallium chloride TlCl
U217	10102-45-1	Thallium(I) nitrate
U218	62-55-5	Thioacetamide
U410	59669-26-0	Thiodicarb. (5/96)
U153	74-93-1	Thiomethanol (I, T)
U244	137-26-8	Thioperoxydicarbonic diamide [(H ₂ N)C(S)] ₂ S ₂ , tetramethyl-
U409	23564-05-8	Thiophanate-methyl. (5/96)
U219	62-56-6	Thiourea
U244	137-26-8	Thiram
U220	108-88-3	Toluene
U221	25376-45-8	Toluenediamine
U223	26471-62-5	Toluene diisocyanate (R, T)
U328	95-53-4	o-Toluidine
U353	106-49-0	p-Toluidine
U222	636-21-5	o-Toluidine hydrochloride
U389	2303-17-5	Triallate. (5/96)
U011	61-82-5	1H-1,2,4-Triazol-3-amine
U227	79-00-5	1,1,2-Trichloroethane
U228	79-01-6	Trichloroethylene
U121	75-69-4	Trichloromonofluoromethane
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol
U404	121-44-8	Triethylamine.(5/96)
U234	99-35-4	1,3,5-Trinitrobenzene (R, T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate
U236	72-57-1	Trypan blue
U237	66-75-1	Uracil mustard
U176	759-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	Urea, N-methyl-N-nitroso-
U043	75-01-4	Vinyl chloride
U248	¹ 81-81-2	Warfarin, & salts, when present at concentrations of 0.3% or less
U239	1330-20-7	Xylene (I)
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17- dimethoxy-18-[(3,4,5- trimethoxybenzoyl)oxy]-, methyl ester, (3beta,16beta,17alpha,18beta,20alpha)-
U249	1314-84-7	Zinc phosphide Zn ₃ P ₂ , when present at concentrations of 10% or less

¹ CAS Number given for parent compound only.

261.34 [Reserved]

261.35 Deletion of certain hazardous waste codes following equipment cleaning and replacement

(a) Wastes from wood preserving processes at plants that do not resume or initiate use of chlorophenolic preservatives will not meet the listing definition of F032 once the generator has met all of the requirements of paragraphs (b) and (c) of this section. These wastes may, however, continue to meet another hazardous waste listing description or may exhibit one or more of the hazardous waste characteristics.

(b) Generators must either clean or replace all process equipment that may have come into contact with chlorophenolic formulations or constituents thereof, including, but not limited to, treatment cylinders, sumps, tanks, piping systems, drip pads, fork lifts, and trams, in a manner that minimizes or eliminates the escape of hazardous waste or

constituents, leachate, contaminated drippage, or hazardous waste decomposition products to the ground water, surface water, or atmosphere.

(1) Generators shall do one of the following:

(i) Prepare and follow an equipment cleaning plan and clean equipment in accordance with this section;

(ii) Prepare and follow an equipment replacement plan and replace equipment in accordance with this section; or

(iii) Document cleaning and replacement in accordance with this section, carried out after termination of use of chlorophenolic preservations.

(2) Cleaning Requirements.

(i) Prepare and sign a written equipment cleaning plan that describes:

- (A) The equipment to be cleaned;
- (B) How the equipment will be cleaned;
- (C) The solvent to be used in cleaning;

- (D) How solvent rinses will be tested;
- and
- (E) How cleaning residues will be disposed.
- (ii) Equipment must be cleaned as follows:
- (A) Remove all visible residues from process equipment;
- (B) Rinse process equipment with an appropriate solvent until dioxins and dibenzofurans are not detected in the final solvent rinse.
- (iii) Analytical requirements.
- (A) Rinses must be tested in accordance with SW-846, Method 8290.
- (B) "Not detected" means at or below the lower method calibration limit (MCL) in Method 8290, Table 1.
- (iv) The generator must manage all residues from the cleaning process as F032 waste.
- (3) Replacement requirements.
- (i) Prepare and sign a written equipment replacement plan that describes:
- (A) The equipment to be replaced;
- (B) How the equipment will be replaced; and
- (C) How the equipment will be disposed.
- (ii) The generator must manage the discarded equipment as F032 waste.
- (4) Documentation requirements.
- (i) Document that previous equipment cleaning and/or replacement was performed in accordance with this section and occurred after cessation of use of chlorophenolic preservatives.
- (c) The generator must maintain the following records documenting the cleaning and replacement as part of the facility's operating record:
- (1) The name and address of the facility;
- (2) Formulations previously used and the date on which their use ceased in each process at the plant;
- (3) Formulations currently used in each process at the plant;
- (4) The equipment cleaning or replacement plan;
- (5) The name and address of any persons who conducted the cleaning and replacement;
- (6) The dates on which cleaning and replacement were accomplished;

261.38 Comparable/Syngas Fuel Exclusion.

- (7) The dates of sampling and testing;
- (8) A description of the sample handling and preparation techniques, including techniques used for extraction, containerization, preservation, and chain-of-custody of the samples;
- (9) A description of the tests performed, the date the tests were performed, and the results of the tests;
- (10) The name and model numbers of the instrument(s) used in performing the tests;
- (11) QA/QC documentation; and
- (12) The following statement signed by the generator or his authorized representative:
- I certify under penalty of law that all process equipment required to be cleaned or replaced under 261.35 was cleaned or replaced as represented in the equipment cleaning and replacement plan and accompanying documentation. I am aware that there are significant penalties for providing false information, including the possibility of fine or imprisonment.

261.38 Comparable/Syngas Fuel Exclusion.

Wastes that meet the following comparable/syngas fuel requirements are not solid wastes: (11/99)

- (a) Comparable fuel specifications.
- (1) Physical specifications.
- (i) Heating value. The heating value must exceed 5,000 BTU/lbs. (11,500 J/g).
- (ii) Viscosity. The viscosity must not exceed: 50 cs, as-fired.
- (2) Constituent specifications. For compounds listed below, the specification levels and, where non-detect is the specification, minimum required detection limits are: [see Table 1].
- (b) Synthesis gas fuel specification.-Synthesis gas fuel (i.e., syngas fuel) that is generated from hazardous waste must:
- (1) Have a minimum Btu value of 100 Btu/Scf;
- (2) contain less than 1 ppmv of total halogen;
- (3) contain less than 300 ppmv of total nitrogen other than diatomic nitrogen (N₂);
- (4) contain less than 200 ppmv of hydrogen sulfide; and
- (5) Contain less than 1 ppmv of each hazardous constituent in the target list of Appendix VIII constituents of this part.

261.38 Table 1 Detection and Detection Limit Values for Comparable Fuel Specification					
Chemical name	CAS #	Composite value (mg/kg)	Heating value (BTU/lb)	Concentration limit (mg/kg at 10,000 BTU/lb)	Minimum required detection limit (mg/kg)
Total Nitrogen as N	NA	9000	18400	4900~	
Total Halogens as Cl	NA	1000	18400	540	
Total Organic Halogens as Cl	NA			(¹)	
Polychlorinated biphenyls, total [Aroclors, total]	1336-36-3	ND		ND	1.4
Cyanide, total.....	57-12-5	ND		ND	1.0
Metals:					

261.38 Table 1 Detection and Detection Limit Values for Comparable Fuel Specification					
Chemical name	CAS #	Composite value (mg/kg)	Heating value (BTU/lb)	Concentration limit (mg/kg at 10,000 BTU/lb)	Minimum required detection limit (mg/kg)
Antimony, total	7440-36-0	ND		12	
Arsenic, total	7440-38-2	ND		0.23	
Barium, total	7440-39-3	ND		23	
Beryllium, total	7440-41-7	ND		1.2	
Cadmium, total	7440-43-9		ND		1.2
Chromium, total	7440-47-3	ND		2.3	
Cobalt	7440-48-4	ND		4.6	
Lead, total	7439-92-1	57	18100	31	
Manganese	7439-96-5	ND		1.2	
Mercury total	7439-97-6	ND		0.25	
Nickel, total	7440-02-0	106	18400	58	
Selenium, total	7782-49-2	ND		0.23	
Silver, total	7440-22-4	ND		2.3	
Thallium, total	7440-28-0	ND		23	
Hydrocarbons:					
Benzo[a]anthracene	56-55-3	ND		2400	
Benzene	71-43-2	8000	19600	4100	
Benzo[b]fluoranthene	205-99-2	ND		2400	
Benzo[k]fluoranthene	207-08-9	ND		2400	
Benzo[a]pyrene	50-32-8	ND		2400	
Chrysene	218-01-9	ND		2400	
Dibenzo[a, h]anthracene	53-70-3	ND		2400	
7,12-Dimethylbenz[a]anthracene	57-97-6	ND		2400	
Fluoranthene	206-44-0	ND		2400	
Indeno(1,2,3-cd)pyrene	193-39-5	ND		2400	
3-Methylcholanthrene	56-49-5	ND		2400	
Naphthalene	91-20-3	6200	19400	3200	
Toluene	108-88-3	69000	19400	36000	
Oxygenates:					
Acetophenone	98-86-2	ND		2400	
Acrolein	107-02-8	ND		39	
Allyl alcohol	107-18-6	ND		30	
Bis(2-ethylhexyl)phthalate [Di-2-ethylhexyl phthalate]	117-81-7	ND		2400	
Butyl benzyl phthalate	85-68-7	ND		2400	
o-Cresol [2-Methyl phenol]	95-48-7	ND		2400	
m-Cresol [3-Methyl phenol]	108-39-4	ND		2400	
p-Cresol [4-Methyl phenol]	106-44-5	ND		2400	
Di-n-butyl phthalate	84-74-2	ND		2400	
Diethyl phthalate	84-66-2	ND		2400	
2,4-Dimethylphenol	105-67-9	ND		2400	
Dimethyl phthalate	131-11-3	ND		2400	
Di-n-octyl phthalate	117-84-0	ND		2400	
Endothall	145-73-3	ND		100	
Ethyl methacrylate	97-63-2	ND		39	
2-Ethoxyethanol [Ethylene glycol monoethyl ether]	110-80-5	ND		100	
Isobutyl alcohol	78-83-1	ND		39	
Isosafrole	120-58-1	ND		2400	
Methyl ethyl ketone [2-Butanone]	78-93-3	ND		39	
Methyl methacrylate	80-62-6	ND		39	
1,4-Naphthoquinone	130-15-4	ND		2400	
Phenol	108-95-2	ND		2400	
Propargyl alcohol [2-Propyn-1-ol]	107-19-7	ND		30	
Safrole	94-59-7	ND		2400	
Sulfonated Organics:					
Carbon disulfide	75-15-0	ND		ND	39
Disulfoton	298-04-4	ND		ND	2400
Ethyl methanesulfonate	62-50-0	ND		ND	2400

261.38 Table 1 Detection and Detection Limit Values for Comparable Fuel Specification					
Chemical name	CAS #	Composite value (mg/kg)	Heating value (BTU/lb)	Concentration limit (mg/kg at 10,000 BTU/lb)	Minimum required detection limit (mg/kg)
Methyl methanesulfonate	66-27-3	ND		ND	2400
Phorate	298-02-2	ND		ND	2400
1,3-Propane sultone	1120-71-4	ND		ND	100
Tetraethyldithiopyrophosphate [Sulfotepp]	3689-24-5	ND		ND	2400
Thiophenol [Benzenethiol]	108-98-5	ND		ND	30
O,O,O-Triethyl phosphorothioate	126-68-1	ND		ND	2400
Nitrogenated Organics:					
Acetonitrile [Methyl cyanide]	75-05-8	ND		ND	39
2-Acetylaminofluorene [2-AAF]	53-96-3	ND		ND	2400
Acrylonitrile	107-13-1	ND		ND	39
4-Aminobiphenyl	92-67-1	ND		ND	2400
4-Aminopyridine	504-24-5	ND		ND	100
Aniline	62-53-3	ND		ND	2400
Benzidine	92-87-5	ND		ND	2400
Dibenz[a, j]acridine	224-42-0	ND		ND	2400
O,O-Diethyl O-pyrazinyl phosphorothioate [Thionazin]	297-97-2	ND		ND	2400
Dimethoate	60-51-5	ND		ND	2400
p-(Dimethylamino) azobenzene [4-Dimethylaminoazobenzene]	60-11-7	ND		ND	2400
3,3'-Dimethylbenzidine	119-93-7	ND		ND	2400
a , a-Dimethylphenethylamine	122-09-8	ND		ND	2400
3,3'-Dimethoxybenzidine	119-90-4	ND		ND	100
1,3-Dinitrobenzene [m-Dinitrobenzene]	99-65-0	ND		ND	2400
4,6-Dinitro-o-cresol	534-52-1	ND		ND	2400
2,4-Dinitrophenol	51-28-5	ND		ND	2400
2,4-Dinitrotoluene	121-14-2	ND		ND	2400
2,6-Dinitrotoluene	606-20-2	ND		ND	2400
Dinoseb [2-sec-Butyl-4,6-dinitrophenol]	88-85-7	ND		ND	2400
Diphenylamine	122-39-4	ND		ND	2400
Ethyl carbamate [Urethane]	51-79-6	ND		ND	100
Ethylenethiourea (2-Imidazolidinethione)	96-45-7	ND		ND	110
Famphur	52-85-7	ND		ND	2400
Methacrylonitrile	126-98-7	ND		ND	39
Methapyrilene	91-80-5	ND		ND	2400
Methomyl	16752-77-5	ND		ND	57
2-Methylactonitrile, [Acetone cyanohydrin]	75-86-5	ND		ND	100
Methyl parathion	298-00-0	ND		ND	2400
MNNG (N-Metyl-N-nitroso-N'-nitroguanidine)	70-25-7	ND		ND	110
1-Naphthylamine, [α -Naphthylamine]	134-32-7	ND		ND	2400
2-Naphthylamine, [β -Naphthylamine]	91-59-8	ND		ND	2400
Nicotine	54-11-5	ND		ND	100
4-Nitroaniline [p-Nitroaniline]	100-01-6	ND		ND	2400
Nitrobenzene	98-95-3	ND		ND	2400
p-Nitrophenol, [p-Nitrophenol]	100-02-7	ND		ND	2400
5-Nitro-o-toluidine	99-55-8	ND		ND	2400
N-Nitrosodi-n-butylamine	924-16-3	ND		ND	2400
N-Nitrosodiethylamine	55-18-5	ND		ND	2400
N-Nitrosodiphenylamine, [Diphenylnitrosamine]	86-30-6	ND		ND	2400
N-Nitroso-N-methylethylamine	10595-95-6	ND		ND	2400
N-Nitrosomorpholine	59-89-2	ND		ND	2400
N-Nitrosopiperidine	100-75-4	ND		ND	2400
N-Nitrosopyrrolidine	930-55-2	ND		ND	2400
2-Nitropropane	79-46-9	ND		ND	30
Parathion	56-38-2	ND		ND	2400
Phenacetin	62-44-2	ND		ND	2400
1,4-Phenylene diamine, [p-Phenylenediamine]	106-50-3	ND		ND	2400
N-Phenylthiourea	103-85-5	ND		ND	57
2-Picoline [alpha-Picoline]	109-06-8	ND		ND	2400

261.38 Table 1 Detection and Detection Limit Values for Comparable Fuel Specification					
Chemical name	CAS #	Composite value (mg/kg)	Heating value (BTU/lb)	Concentration limit (mg/kg at 10,000 BTU/lb)	Minimum required detection limit (mg/kg)
Propylthiouracil, [6-Propyl-2-thiouracil]	51-52-5	ND		ND	100
Pyridine	110-86-1	ND		ND	2400
Strychnine	57-24-9	ND		ND	100
Thioacetamide	62-55-5	ND		ND	57
Thiofanox	39196-18-4	ND		ND	100
Thiourea	62-56-6	ND		ND	57
Toluene-2,4-diamine [2,4-Diaminotoluene]	95-80-7	ND		ND	57
Toluene-2,6-diamine [2,6-Diaminotoluene]	823-40-5	ND		ND	57
o-Toluidine	95-53-4	ND		ND	2400
p-Toluidine	106-49-0	ND		ND	100
1,3,5-Trinitrobenzene, [sym-Trinitrobenzene]	99-35-4	ND		ND	2400
Halogenated Organic:					
Allyl chloride	107-05-1	ND		ND	39
Aramite	140-57-8	ND		ND	2400
Benzal chloride [Dichloromethyl benzene]	98-87-3	ND		ND	100
Benzyl chloride	100-44-77	ND		ND	100
bis(2-Chloroethyl)ether [Dichloroethyl ether]	111-44-4	ND		ND	2400
Bromoform [Tribromomethane]	75-25-2	ND		ND	39
Bromomethane [Methyl bromide]	74-83-9	ND		ND	39
4-Bromophenyl phenyl ether [p-Bromo diphenyl ether]	101-55-3	ND		ND	2400
Carbon tetrachloride	56-23-5	ND		ND	39
Chlordane	57-74-9	ND		ND	14
p-Chloroaniline	106-47-8	ND		ND	2400
Chlorobenzene	108-90-7	ND		ND	39
Chlorobenzilate	510-15-6	ND		ND	2400
p-Chloro-m-cresol	59-50-7	ND		ND	2400
2-Chloroethyl vinyl ether	110-75-8	ND		ND	39
Chloroform	67-66-3	ND		ND	39
Chloromethane [Methyl chloride]	74-87-3	ND		ND	39
2-Chloronaphthalene [beta-Chloronaphthalene]	91-58-7	ND		ND	2400
2-Chlorophenol [o-Chlorophenol]	95-57-8	ND		ND	2400
Chloroprene [2-Chloro-1,3-butadiene]	1126-99-8	ND		ND	39
2,4-D [2, 4-Dichlorophenoxyacetic acid]	94-75-7	ND		ND	7.0
Diallate	2303-16-4	ND		ND	2400
1,2-Dibromo-3-chloropropane	96-12-8	ND		ND	39
1,2-Dichlorobenzene [o-Dichlorobenzene]	95-50-1	ND		ND	2400
1,3-Dichlorobenzene [m-Dichlorobenzene]	541-73-1	ND		ND	2400
1,4-Dichlorobenzene [p-Dichlorobenzene]	106-46-7	ND		ND	2400
3,3'-Dichlorobenzidine	91-94-1	ND		ND	2400
Dichlorodifluoromethane [CFC-12]	75-71-8	ND		ND	39
1,2-Dichloroethane [Ethylene dichloride]	107-06-2	ND		ND	39
1,1-Dichloroethylene [Vinylidene chloride]	75-35-4	ND		ND	39
Dichloromethoxy ethane [Bis(2-chloroethoxy)methane]	111-91-1	ND		ND	2400
2,4-Dichlorophenol	120-83-2	ND		ND	2400
2,6-Dichlorophenol	87-65-0	ND		ND	2400
1,2-Dichloropropane [Propylene dichloride]	78-87-5	ND		ND	39
cis-1,3-Dichloropropylene	10061-01-5	ND		ND	39
trans-1,3 -Dichloropropylene	10061-02-6	ND		ND	39
1,3-Dichloro-2-propanol	96-23-1	ND		ND	30
Endosulfan I	959-98-8	ND		ND	1.4
Endosulfan II	33213-65-9	ND		ND	1.4
Endrin	72-20-8	ND		ND	1.4
Endrin aldehyde	7421-93-4	ND		ND	1.4
Endrin Ketone	53494-70-5	ND		ND	1.4
Epichlorohydrin [1-Chloro-2,3-epoxy propane]	106-89-8	ND		ND	30
Ethylidene dichloride [1,1-Dichloroethane]	75-34-3	ND		ND	39
2-Fluoroacetamide	640-19-7	ND		ND	100
Heptachlor	76-44-8	ND		ND	1.4

261.38 Table 1 Detection and Detection Limit Values for Comparable Fuel Specification					
Chemical name	CAS #	Composite value (mg/kg)	Heating value (BTU/lb)	Concentration limit (mg/kg at 10,000 BTU/lb)	Minimum required detection limit (mg/kg)
Heptachlor epoxide	1024-57-3	ND		ND	2.8
Hexachlorobenzene	118-74-1	ND		ND	2400
Hexachloro-1, 3-butadiene [Hexachlorobutadiene]	87-68-3	ND		ND	2400
Hexachlorocyclopentadiene	77-47-4	ND		ND	2400
Hexachloroethane	67-72-1	ND		ND	2400
Hexachlorophene	70-30-4	ND		ND	59000
Hexachloropropene [Hexachloropropylene]	1888-71-7	ND		ND	2400
Isodrin	465-73-6	ND		ND	2400
Kepone [Chlordecone]	143-50-0	ND		ND	4700
Lindane [gamma-BHC] [gamma-Hexachlorocyclohexane]	58-89-9	ND		ND	1.4
Methylene chloride [Dichloromethane]	75-09-2	ND		ND	39
4,4'-Methylene-bis(2-chloroaniline)	101-14-4	ND		ND	100
Methyl iodide [Iodomethane]	74-88-4	ND		ND	39
Pentachlorobenzene	608-93-5	ND		ND	2400
Pentachloroethane	76-01-7	ND		ND	39
Pentachloronitrobenzene [PCNB] [Quintobenzene] [Quintozene]	82-68-8	ND		ND	2400
Pentachlorophenol	87-86-5	ND		ND	2400
Pronamide	23950-58-5	ND		ND	2400
Silvex [2,4,5-Trichlorophenoxypropionic acid]	93-72-1	ND		ND	7.0
2,3,7,8-Tetrachlorodibenzo-p-dioxin [2,3,7,8-TCDD]	1746-01-6	ND		ND	30
1,2,4,5-Tetrachlorobenzene	95-94-3	ND		ND	2400
1,1,2,2-Tetrachloroethane	79-34-5	ND		ND	39
Tetrachloroethylene [Perchloroethylene]	127-18-4	ND		ND	39
2,3,4,6-Tetrachlorophenol	58-90-2	ND		ND	2400
1,2,4-Trichlorobenzene	120-82-1	ND		ND	2400
1,1,1-Trichloroethane [Methyl chloroform]	71-55-6	ND		ND	39
1,1,2-Trichloroethane [Vinyl trichloride]	79-00-5	ND		ND	39
Trichloroethylene	79-01-6	ND		ND	39
Trichlorofluoromethane [Trichloromonofluoromethane]	75-69-4	ND		ND	39
2,4,5-Trichlorophenol	95-95-4	ND		ND	2400
2,4,6-Trichlorophenol	88-06-2	ND		ND	2400
1,2,3-Trichloropropane	96-18-4	ND		ND	39
Vinyl Chloride	75-01-4	ND		ND	39

Notes: NA - Not Applicable.

ND - Nondetect

(1) 25 or individual halogenated organics listed below.

(c) Implementation. Waste that meets the comparable or syngas fuel specifications provided by paragraphs (a) or (b) of this section (these constituent levels must be achieved by the comparable fuel when generated, or as a result of treatment or blending, as provided in (3) or (4) below) is excluded from the definition of solid waste provided that the following requirements are met:

(1) Notices-For purposes of this section, the person claiming and qualifying for the exclusion is called the comparable/syngas fuel generator and the person burning the comparable/syngas fuel is called the comparable/syngas burner. The person who generates the comparable fuel or syngas fuel must claim and certify to the exclusion.

(i) State RCRA and CAA Directors in Authorized States or Regional RCRA and CAA Directors in Unauthorized States.

(A) The generator must submit a one-time notice to the Regional or State RCRA and CAA Directors, in whose jurisdiction the exclusion is being claimed and where the comparable/syngas fuel will be burned, certifying compliance with the conditions of the exclusion and providing documentation as required by paragraph (C);

(B) If the generator is a company that generates comparable/syngas fuel at more than one facility, the generator shall specify at which sites the comparable/syngas fuel will be generated;

(C) A comparable/syngas fuel generator's notification to the Directors must contain the following items:

(1) the name, address, and RCRA ID number of the person/facility claiming the exclusion;

(2) the applicable EPA Hazardous Waste Codes for the hazardous waste;

(3) name and address of the units, meeting the requirements of 261.38(c)(2), that will burn the comparable/syngas fuel; and

(4) the following statement is signed and submitted by the person claiming the exclusion or his authorized representative:

Under penalty of criminal and civil prosecution for making or submitting false statements, representations, or omissions, I certify that the requirements of 261.38 have been met for all waste identified in this notification. Copies of the records and information required at 261.38(c)(10) are available at the comparable/syngas fuel generators facility. Based on my inquiry of the individuals immediately responsible for obtaining the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(ii) Public Notice. Prior to burning an excluded comparable/syngas fuel, the burner must publish in a major newspaper of general circulation local to the site where the fuel will be burned, a notice entitled "Notification of Burning a Comparable/Syngas Fuel Excluded Under the Resource Conservation and Recovery Act" containing the following information:

(A) name, address, and RCRA ID number of the generating facility;

(B) name and address of the unit(s) that will burn the comparable/syngas fuel;

(C) a brief, general description of the manufacturing, treatment, or other process generating the comparable/syngas fuel;

(D) an estimate of the average and maximum monthly and annual quantity of the waste claimed to be excluded; and

(E) name and mailing address of the Regional or State Directors to whom the claim was submitted.

(2) Burning.-The comparable/syngas fuel exclusion for fuels meeting the requirements of paragraphs (a) or (b) and (c)(1) applies only if the fuel is burned in the following units that also shall be subject to Federal/State/local air emission requirements, including all applicable CAA MACT requirements:

(i) Industrial furnaces as defined in 260.10 of this chapter;

(ii) Boilers, as defined in 260.10 of this chapter, that are further defined as follows:

(A) Industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including

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the component parts of products, by mechanical or chemical processes; or

(B) Utility boilers used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale;

(iii) Hazardous waste incinerators subject to regulation under Subpart O of parts 264 or 265 of this chapter or applicable CAA MACT standards.

(iv) Gas turbines used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale. (6/02)

(3) Blending to Meet the Viscosity Specification.- A hazardous waste blended to meet the viscosity specification shall:

(i) as generated and prior to any blending, manipulation, or processing meet the constituent and heating value specifications of paragraphs (a)(1)(i) and (a)(2); (10/01)

(ii) be blended at a facility that is subject to the applicable requirements of parts 264 and 265, or 262.34; and

(iii) not violate the dilution prohibition of 261.38(c)(6).

(4) Treatment to Meet the Comparable Fuel Exclusion Specifications.

(i) A hazardous waste may be treated to meet the exclusion specifications of (a)(1) and (2) provided the treatment:

(A) destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying hazardous constituents or materials;

(B) is performed at a facility that is subject to the applicable requirements of parts 264 and 265, or 262.34; and

(C) does not violate the dilution prohibition of 261.38(c)(6).

(ii) Residuals resulting from the treatment of a hazardous waste listed in Subpart D of this part to generate a comparable fuel remain a hazardous waste.

(5) Generation of a Syngas Fuel.

(i) A syngas fuel can be generated from the processing of hazardous wastes to meet the exclusion specifications of 261.38(b) provided the processing:

(A) destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying constituents or materials;

(B) is performed at a facility that is subject to the applicable requirements of parts 264 and 265, or 262.34 or is an exempt recycling unit pursuant to 261.6(c); and

(C) does not violate the dilution prohibition of 261.38(c)(6).

(ii) Residuals resulting from the treatment of a hazardous waste listed in Subpart D of this part to generate a syngas fuel remain a hazardous waste.

(6) Dilution Prohibition for Comparable and Syngas Fuels.- No generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a hazardous waste to meet the exclusion specifications of (a)(1)(i), (a)(2) or (b) of this section.

(7) Waste Analysis Plans. The generator of a comparable/syngas fuel shall develop and follow a written waste analysis plan which describes the procedures for sampling and analysis of the hazardous waste to be excluded. The waste analysis plan shall be developed in accordance with the applicable sections of the "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846). The plan shall be followed and retained at the facility excluding the waste.

(i) At a minimum, the plan must specify:

(A) the parameters for which each hazardous waste will be analyzed and the rationale for the selection of those parameters;

(B) the test methods which will be used to test for these parameters;

(C) the sampling method which will be used to obtain a representative sample of the waste to be analyzed;

(D) the frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date; and

(E) if process knowledge is used in the waste determination, any information prepared by the generator in making such determination.

(ii) The waste analysis plan shall also contain records of the following:

(A) the dates and times waste samples were obtained, and the dates the samples were analyzed;

(B) the names and qualifications of the person(s) who obtained the samples;

(C) a description of the temporal and spatial locations of the samples;

(D) the name and address of the laboratory facility at which analyses of the samples were performed;

(E) a description of the analytical methods used, including any clean-up and sample preparation methods;

(F) all quantitation limits achieved and all other quality control results for the analysis (including method blanks, duplicate analyses, matrix spikes, etc.), laboratory quality assurance data, and description of any deviations from analytical methods written in the plan or from any other activity written in the plan which occurred;

(G) all laboratory results demonstrating that the exclusion specifications have been met for the waste; and

(H) all laboratory documentation that support the analytical results, unless a contract between

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the claimant and the laboratory provides for the documentation to be maintained by the laboratory for the period specified in 261.38(c)(11) and also provides for the availability of the documentation to the claimant upon request.

(iii) Syngas fuel generators shall submit for approval, prior to performing sampling, analysis, or any management of a syngas fuel as an excluded waste, a waste analysis plan containing the elements of (i) above to the appropriate regulatory authority. The approval of waste analysis plans must be stated in writing and received by the facility prior to sampling and analysis to demonstrate the exclusion of a syngas. The approval of the waste analysis plan may contain such provisions and conditions as the regulatory authority deems appropriate.

(8) Comparable Fuel Sampling and Analysis.

(i) General. For each waste for which an exclusion is claimed, the generator of the hazardous waste must test for all the constituents on appendix VIII to this part, except those that the generator determines, based on testing or knowledge, should not be present in the waste. The generator is required to document the basis of each determination that a constituent should not be present. The generator may not determine that any of the following categories of constituents should not be present:

(A) a constituent that triggered the toxicity characteristic for the waste constituents that were the basis of the listing of the waste stream, or constituents for which there is a treatment standard for the waste code in 268.40;

(B) a constituent detected in previous analysis of the waste;

(C) constituents introduced into the process that generates the waste; or

(D) constituents that are byproducts or side reactions to the process that generates the waste. Note to paragraph (c)(8): Any claim under this section must be valid and accurate for all hazardous constituents; a determination not to test for a hazardous constituent will not shield a generator from liability should that constituent later be found in the waste above the exclusion specifications.

(ii) For each waste for which the exclusion is claimed where the generator of the comparable/syngas fuel is not the original generator of the hazardous waste, the generator of the comparable/syngas fuel may not use process knowledge pursuant to (i) above and must test to determine that all of the constituent specifications of 261.38(a)(2) and 261.38(b) have been met.

(iii) The comparable/syngas fuel generator may use any reliable analytical method to demonstrate that no constituent of concern is present at concentrations above the specification levels. It is the responsibility of the generator to ensure that the

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sampling and analysis are unbiased, precise, and representative of the waste. For the waste to be eligible for exclusion, a generator must demonstrate that:

(A) each constituent of concern is not present in the waste above the specification level at the 95% upper confidence limit around the mean; and

(B) the analysis could have detected the presence of the constituent at or below the specification level at the 95% upper confidence limit around the mean.

(iv) Nothing in this paragraph preempts, overrides or otherwise negates the provision in 262.11 of this chapter, which requires any person who generates a solid waste to determine if that waste is a hazardous waste.

(v) In an enforcement action, the burden of proof to establish conformance with the exclusion specification shall be on the generator claiming the exclusion.

(vi) The generator must conduct sampling and analysis in accordance with their waste analysis plan developed under (7) above.

(vii) Syngas fuel and comparable fuel that has not been blended in order to meet the kinematic viscosity specifications shall be analyzed as generated.

(viii) If a comparable fuel is blended in order to meet the kinematic viscosity specifications, the generator shall:

(A) analyze the fuel as generated to ensure that it meets the constituent and heating value specifications; and

(B) after blending, analyze the fuel again to ensure that the blended fuel continues to meet all comparable/syngas fuel specifications.

(ix) Excluded comparable/syngas fuel must be re-tested, at a minimum, annually and must be retested after a process change that could change the chemical or physical properties of the waste.

(9) Speculative Accumulation. Any persons handling a comparable/syngas fuel are subject to the speculative accumulation test under 261.2(c)(4).

(10) Records. The generator must maintain records of the following information on-site:

(i) all information required to be submitted to the implementing authority as part of the notification of the claim:

(A) the owner/operator name, address, and RCRA facility ID number of the person claiming the exclusion;

(B) the applicable EPA Hazardous Waste Codes for each hazardous waste excluded as a fuel; and

(C) the certification signed by the person claiming the exclusion or his authorized representative.

(ii) a brief description of the process that generated the hazardous waste and process that generated the excluded fuel, if not the same;

(iii) an estimate of the average and maximum monthly and annual quantities of each waste claimed to be excluded;

(iv) documentation for any claim that a constituent is not present in the hazardous waste as required under 261.38(c)(8)(i);

(v) the results of all analyses and all detection limits achieved as required under 261.38(c)(8);

(vi) if the excluded waste was generated through treatment or blending, documentation as required under section 261.38(c)(3) or (4);

(vii) if the waste is to be shipped off-site, a certification from the burner as required under section 261.38(c)(12);

(viii) A waste analysis plan and the results of the sampling and analysis that includes the following:

(A) the dates and times waste samples were obtained, and the dates the samples were analyzed;

(B) the names and qualifications of the person(s) who obtained the samples;

(C) a description of the temporal and spatial locations of the samples;

(D) the name and address of the laboratory facility at which analyses of the samples were performed;

(E) a description of the analytical methods used, including any clean-up and sample preparation methods;

(F) all quantitation limits achieved and all other quality control results for the analysis (including method blanks, duplicate analyses, matrix spikes, etc.), laboratory quality assurance data, and description of any deviations from analytical methods written in the plan or from any other activity written in the plan which occurred;

(G) all laboratory analytical results demonstrating that the exclusion specifications have been met for the waste; and

(H) all laboratory documentation that support the analytical results, unless a contract between the claimant and the laboratory provides for the documentation to be maintained by the laboratory for the period specified in 261.38(c)(11) and also provides for the availability of the documentation to the claimant upon request; and

(ix) If the generator ships comparable/syngas fuel off-site for burning, the generator must retain for each shipment the following information on-site:

(A) the name and address of the facility receiving the comparable/syngas fuel for burning;

(B) the quantity of comparable/syngas fuel shipped and delivered;

(C) the date of shipment or delivery;

(D) a cross-reference to the record of comparable/syngas fuel analysis or other information used to make the determination that the comparable/syngas fuel meets the specifications as required under 261.38(c)(8); and

(E) a one-time certification by the burner as required under 261.38(c)(12).

(11) **Records Retention.** Records must be maintained for the period of three years. A generator must maintain a current waste analysis plan during that three year period.

(12) **Burner certification.** Prior to submitting a notification to the State and Regional Directors, a comparable/syngas fuel generator who intends to ship their fuel off-site for burning must obtain a one-time written, signed statement from the burner:

(i) certifying that the comparable/syngas fuel will only be burned in an industrial furnace or boiler, utility boiler, or hazardous waste incinerator, as required under paragraph (c)(2);

(ii) identifying the name and address of the units that will burn the comparable/syngas fuel; and

(iii) certifying that the state in which the burner is located is authorized to exclude wastes as comparable/syngas fuel under the provisions of 261.38.

(13) **Ineligible Waste Codes.** Wastes that are listed because of presence of dioxins or furans, as set out in Appendix VII of Part 261, are not eligible for this exclusion, and any fuel produced from or otherwise containing these wastes remains a hazardous waste subject to full Subtitle C regulation

Appendix I Representative Sampling Methods

(12/92; 12/93)

The methods and equipment used for sampling waste materials will vary with the form and consistency of the waste materials to be sampled. Samples collected using the sampling protocols listed below, for sampling waste with properties similar to the indicated materials, will be considered by the Agency to be representative of the waste.

Extremely viscous liquid - ASTM Standard D140-70

Crushed or powdered material - ASTM Standard D346-75

Soil or rock-like material - ASTM Standard D420-69

Soil-like material - ASTM Standard D1452-65.

Fly Ash-like material - ASTM Standard D2234-76

[ASTM Standards are available from ASTM, 1916 Race Street, Philadelphia, PA 19103]

Containerized liquid wastes - "COLIWASA"

described in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods,"^{1a} U.S.

Environmental Protection Agency Publication SW-846,

Liquid waste in pits, ponds, lagoons, and similar reservoirs. - "Pond Sampler" described in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods."^{1a}

FOOTNOTE: ^{1a} These methods are also described in Samplers and Sampling Procedures for Hazardous Waste Streams, EPA 600/2-80-018, January 1980.

The Department will consider other methodologies for testing from other sources (such as) i.e., Standard Methods, other Federal Regulations, as long as the proper QA/QC is provided. This manual also contains additional information on application of these protocols.

Appendix II Method 1311 Toxicity Characteristic Leaching Procedure (TCLP)

NOTE: The TCLP (Method 1311) is published in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in 260.11. (12/92; 12/93)

Appendix III Chemical Analysis Test Methods

Note: Appropriate analytical procedures to determine whether a sample contains a given toxic constituent are specified in Chapter Two, "Choosing the Correct Procedure" found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in 260.11. Prior to final sampling and analysis method selection, the individual should consult the specific section or method described in SW-846 for additional guidance on which of the approved methods should be employed for a specific sample analysis situation. (11/90, 12/92, 12/93)

Appendix IV [Reserved for Radioactive Waste Test Methods]

Appendix V [Reserved for Infectious Waste Treatment Specifications]

Appendix VI [Reserved for Etiologic Agents]

Appendix VII Basis for Listing Hazardous Waste

Hazardous Waste #	Basis for Listing Hazardous Waste Hazardous constituents for which listed (11/90, 12/92, 5/96, 9/98)
F001	Tetrachloroethylene, methylene chloride trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons.
F002	Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trichloroethane, ortho-dichlorobenzene, trichlorofluoromethane.
F003	N.A.
F004	Cresols and cresylic acid, nitrobenzene.
F005	Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, 2-ethoxyethanol, benzene, 2-nitropropane.

F006	Cadmium, hexavalent chromium, nickel, cyanide (complexed).
F007	Cyanide (salts).
F008	Cyanide (salts).
F009	Cyanide (salts).
F010	Cyanide (salts).
F011	Cyanide (salts).
F012	Cyanide (complexed).
F019	Hexavalent chromium, cyanide (complexed).
F020	Tetra- and pentachlorodibenzo-p-dioxins; tetra and pentachlorodi-benzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
F021	Penta- and hexachlorodibenzo-p-dioxins; penta- and hexachlorodibenzofurans; pentachlorophenol and its derivatives.
F022	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans.
F023	Tetra-, and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
F024	Chloromethane, dichloromethane, trichloromethane, carbon tetrachloride, chloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, trans-1,2-dichloroethylene, 1,1-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, 1,1,1,2-tetra-chloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene, pentachloroethane, hexachloroethane, allyl chloride (3-chloropropene), dichloropropane, dichloropropene, 2-chloro-1,3-butadiene, hexachloro-1,3-butadiene, hexachlorocyclopentadiene, hexachlorocyclohexane, benzene, chlorobenzene, dichlorobenzenes, 1,2,4-trichlorobenzene, tetrachlorobenzene, pentachlorobenzene, hexachlorobenzene, toluene, naphthalene.
F025	Chloromethane; Dichloromethane; Trichloromethane; Carbon tetrachloride; Chloroethylene; 1,1-Dichloroethane; 1,2-Dichloroethane; trans-1,2-Dichloroethylene; 1,1-Dichloroethylene; 1,1,1-Trichloroethane; 1,1,2-Trichloroethane; Trichloroethylene; 1,1,1,2-Tetrachloroethane; 1,1,2,2-Tetrachloroethane; Tetrachloroethylene; Pentachloroethane; Hexachloroethane; Allyl chloride (3-Chloropropene); Dichloropropane; Dichloropropene; 2-Chloro-1,3-butadiene; Hexachloro-1,3-butadiene; Hexachlorocyclopentadiene; Benzene; Chlorobenzene; Dichlorobenzene; 1,2,4-Trichlorobenzene; Tetrachlorobenzene; Pentachlorobenzene; Hexachlorobenzene; Toluene; Naphthalene.
F026	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans.
F027	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
F028	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
F032	Benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)-anthracene, indeno(1,2,3-cd)pyrene, pentachlorophenol, arsenic, chromium, tetra-, penta-, hexa-, heptachlorodibenzo-p-dioxins, tetra-, penta-, hexa-, heptachlorodibenzofurans (12/92)
F034	Benz(a)anthracene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, arsenic, chromium (12/92).
F035	Arsenic, chromium, lead (12/92).
F037	Benzene, benzo(a)pyrene, chrysene, lead, chromium (12/92).
F038	Benzene, benzo(a)pyrene chrysene, lead, chromium (12/92).
F039	All constituents for which treatment standards are specified for multi-source leachate (wastewaters and nonwastewaters) under 268.43(a), Table CCW (12/92).
K001	Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-dimethylphenyl, 2,4-dinitrophenol, trichlorophenols, tetrachlorophenols, 2,4-dinitrophenol, creosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benz(a)anthracene, dibenz(a)anthracene, acenaphthalene.
K002	Hexavalent chromium, lead
K003	Hexavalent chromium, lead.
K004	Hexavalent chromium.
K005	Hexavalent chromium, lead.
K006	Hexavalent chromium.
K007	Cyanide (complexed), hexavalent chromium.
K008	Hexavalent chromium.
K009	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid.
K010	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid, chloroacetaldehyde.
K011	Acrylonitrile, acetonitrile, hydrocyanic acid.
K013	Hydrocyanic acid, acrylonitrile, acetonitrile.
K014	Acetonitrile, acrylamide.
K015	Benzyl chloride, chlorobenzene, toluene, benzotrichloride.
K016	Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride, hexachloroethane, perchloroethylene.
K017	Epichlorohydrin, chloroethers [bis(chloromethyl) ether and bis (2-chloroethyl) ethers], trichloropropane, dichloropropanols.
K018	1,2-dichloroethane, trichloroethylene, hexachlorobutadiene, hexachlorobenzene.

K019	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride.
K020	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride.
K021	Antimony, carbon tetrachloride, chloroform.
K022	Phenol, tars (polycyclic aromatic hydrocarbons).
K023	Phthalic anhydride, maleic anhydride.
K024	Phthalic anhydride, 1,4-naphthoquinone.
K025	Meta-dinitrobenzene, 2,4-dinitrotoluene.
K026	Paraldehyde, pyridines, 2-picoline.
K027	Toluene diisocyanate, toluene-2, 4-diamine.
K028	1,1,1-trichloroethane, vinyl chloride.
K029	1,2-dichloroethane, 1,1,1-trichloroethane, vinyl chloride, vinylidene chloride, chloroform.
K030	Hexachlorobenzene, hexachlorobutadiene, hexachloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, ethylene dichloride.
K031	Arsenic.
K032	Hexachlorocyclopentadiene.
K033	Hexachlorocyclopentadiene.
K034	Hexachlorocyclopentadiene.
K035	Creosote, chrysene, naphthalene, fluoranthene benzo(b) fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd) pyrene, benzo(a)anthracene, dibenzo(a)anthracene, acenaphthalene.
K036	Toluene, phosphorodithioic and phosphorothioic acid esters.
K037	Toluene, phosphorodithioic and phosphorothioic acid esters.
K038	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.
K039	Phosphorodithioic and phosphorothioic acid esters.
K040	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.
K041	Toxaphene.
K042	Hexachlorobenzene, ortho-dichlorobenzene.
K043	2,4-dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol.
K044	N.A.
K045	N.A.
K046	Lead.
K047	N.A.
K048	Hexavalent chromium, lead.
K049	Hexavalent chromium, lead.
K050	Hexavalent chromium.
K051	Hexavalent chromium, lead.
K052	Lead.
K060	Cyanide, naphthalene, phenolic compounds, arsenic.
K061	Hexavalent chromium, lead, cadmium.
K062	Hexavalent chromium, lead.
K064	Lead, cadmium.
K065	Lead, cadmium
K066	Lead, cadmium
K069	Hexavalent chromium, lead, cadmium.
K071	Mercury.
K073	Chloroform, carbon tetrachloride, hexachloroethane, trichloroethane, tetrachloroethylene, dichloroethylene, 1,1,2,2-tetrachloroethane.
K083	Aniline, diphenylamine, nitrobenzene, phenylenediamine.
K084	Arsenic.
K085	Benzene, dichlorobenzenes, trichlorobenzenes, tetrachlorobenzenes, pentachlorobenzene, hexachlorobenzene, benzyl chloride.
K086	Lead, hexavalent chromium.
K087	Phenol, naphthalene.
K088	Cyanide (complexes).
K090	Chromium.
K093	Phthalic anhydride, maleic anhydride.
K094	Phthalic anhydride.
K095	1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane.
K096	1,2-dichloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane.
K097	Chlordane, heptachlor.
K098	Toxaphene.

K099	2,4-dichlorophenol, 2,4,6-trichlorophenol.
K100	Hexavalent chromium, lead, cadmium.
K101	Arsenic.
K102	Arsenic.
K103	Aniline, nitrobenzene, phenylenediamine.
K104	Aniline, benzene, diphenylamine, nitrobenzene, phenylenediamine.
K105	Benzene, monochlorobenzene, dichlorobenzenes, 2,4,6-trichlorophenol.
K106	Mercury.
K107	1,1-Dimethylhydrazine (UDMH) (12/92).
K108	1,1-Dimethylhydrazine (UDMH) (12/92).
K109	1,1-Dimethylhydrazine (UDMH) (12/92).
K110	1,1-Dimethylhydrazine (UDMH) (12/92).
K111	2,4-Dinitrotoluene.
K112	2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.
K113	2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.
K114	2,4-Toluenediamine, o-toluidine, p-toluidine.
K115	2,4-Toluenediamine.
K116	Carbon tetrachloride, tetrachloroethylene, chloroform, phosgene.
K117	Ethylene dibromide.
K118	Ethylene dibromide.
K123	Ethylene thiourea.
K124	Ethylene thiourea.
K125	Ethylene thiourea.
K126	Ethylene thiourea.
K131	Dimethyl sulfate, methyl bromide.
K132	Methyl bromide.
K136	Ethylene dibromide.
K140	2,4,6-Tribromophenol. (11/99)
K141	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene. (12/93)
K142	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene. (12/93)
K143	Benzene, benz(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene. (12/93)
K144	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene. (12/93)
K145	Benzene, benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene, naphthalene. (12/93)
K147	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene. (12/93)
K148	Benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene. (12/93)
K149	Benzotrachloride, benzyl chloride, chloroform, chloromethane, chlorobenzene, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, toluene. (12/93)
K150	Carbon tetrachloride, chloroform, chloromethane, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,1,2,2-tetrachloroethane, tetrachloroethylene, 1,2,4-trichlorobenzene. (12/93)
K151	Benzene, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene. (12/93)
K156	Benomyl, carbaryl, carbendazim, carbofuran, carbosulfan, formaldehyde, methylene chloride, triethylamine. (5/96)
K157	Carbon tetrachloride, formaldehyde, methyl chloride, methylene chloride, pyridine, triethylamine. (5/96)
K158	Benomyl, carbendazim, carbofuran, carbosulfan, chloroform, methylene chloride. (5/96)
K159	Benzene, butylate, eptc, molinate, pebulate, vernolate. (5/96)
K160	Benzene, butylate, eptc, molinate, pebulate, vernolate. (5/96)
K161	Antimony, arsenic, metam-sodium, ziram. (5/96)
K169	Benzene. (8/00)
K170	Benzo(a)pyrene, dibenz(a,h)anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, 3-methylcholanthrene, 7,12-dimethylbenz(a)anthracene. (8/00)
K171	Benzene, arsenic. (8/00)
K172	Benzene, arsenic. (8/00)
K174	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD), 1,2,3,4,6,7,8- Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF), 1,2,3,4,7,8,9- Heptachlorodibenzofuran (1,2,3,6,7,8,9-HpCDF), HxCDDs (All Hexachlorodibenzo-p-dioxins), HxCDFs (All Hexachlorodibenzofurans), PeCDDs (All Pentachlorodibenzo-p-dioxins), OCDD (1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin, OCDF (1,2,3,4,6,7,8,9- Octachlorodibenzofuran), PeCDFs (All Pentachlorodibenzofurans), TCDDs (All tetrachlorodi-benzo- p-dioxins), TCDFs (All tetrachlorodibenzofurans). (6/02)
K175	Mercury (6/02)

K176	Arsenic, Lead (6/03)
K177	Antimony (6/03)
K178	Thallium (6/03)
K900	Tributyltin, Tributyltin Oxide, Tributyltin Chloride, Tributyltin Hydroxide, Tributyltin Bromide, Tributyltin Acetate, Tributyltin Fluoride, Triethyltin, Triethyltin Chloride (6/02)

N.A.= Waste is hazardous because it fails the test for the characteristics of ignitability, corrosivity, or reactivity.

Appendix VIII Hazardous Constituents		
Common name	Chemical abstracts name (9/98)	CAS #
A2213 (5/96)	Ethanimidothioic acid, 2- (dimethylamino) -N-hydroxy-2-oxo-, methyl ester	30558-43-1
Acetonitrile	Same	75-05-8
Acetophenone	Ethanone, 1-phenyl-	98-86-2
2-Acetylaminefluorone	Acetamide, N-9H-fluoren-2-yl-	53-96-3
Acetyl chloride	Same	75-36-5
1-Acetyl-2-thiourea	Acetamide, N-(aminothioxomethyl)-	591-08-2
Acrolein	2-Propenal	107-02-8
Acrylamide	2-Propenamide	79-06-1
Acrylonitrile	2-Propenenitrile	107-13-1
Aflatoxins	Same	1402-68-2
Aldicarb	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime	116-06-3
Aldicarb sulfone (5/96)	Propanal, 2-methyl-2-(methylsulfonyl), O-[(methylamino) carbonyl] oxime	1646-88-4
Aldrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha, 8abeta)-	309-00-2
Allyl alcohol	2-Propen-1-ol	107-18-6
Allyl chloride	1-Propane, 3-chloro	107-18-6
Aluminum phosphide	Same	20859-73-8
4-Aminobiphenyl	[1,1'-Biphenyl]-4-amine	92-67-1
5-(Aminomethyl)-3-isoxazolol	3(2H)-Isoxazolone, 5-(aminomethyl)-	2763-96-4
4-Aminopyridine	4-Pyridinamine	504-24-5
Amitrole	1H-1,2,4-Triazol-3-amine	61-82-5
Ammonium vanadate	Vanadic acid, ammonium salt	7803-55-6
Aniline	Benzenamine	62-53-3
Antimony	Same	7440-36-0
Antimony compounds, N.O.S. ¹		
Aramite	Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester	140-57-8
Arsenic	Same	7440-38-2
Arsenic compounds, N.O.S. ¹		
Arsenic acid	Arsenic acid H ₃ AsO ₄	7778-39-4
Arsenic pentoxide	Arsenic oxide As ₂ O ₅	1303-28-2
Arsenic trioxide	Arsenic oxide As ₂ O ₃	1327-53-3
Auramine	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl	492-80-8
Azaserine	L-Serine, diazoacetate (ester)	115-02-6
Barban (5/96)	Carbamic acid, (3-chlorophenyl) -, 4-chloro-2-butynyl ester	101-27-9
Barium	Same	7440-39-3
Barium compounds, N.O.S. ¹		
Barium cyanide	Same	542-62-1
Bendiocarb (5/96)	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate	22781-23-3
Bendiocarb phenol (5/96)	1,3-Benzodioxol-4-ol, 2,2-dimethyl-,	22961-82-6
Benomyl (5/96)	Carbamic acid, [1- [(butylamino) carbonyl]- 1H-benzimidazol-2-yl] -, methyl ester	17804-35-2
Benz[c]acridine	Same	225-51-4
Benz[a]anthracene	Same	56-55-3
Benzal chloride	Benzene, (dichloromethyl)-	98-87-3
Benzene	Same	71-43-2
Benzenearsonic acid	Arsonic acid, phenyl-	98-05-5
Benzidine	[1,1'-Biphenyl]-4,4'-diamine	92-87-5
Benzo[b]fluoranthene	Benz[e]acephenanthrylene	205-99-2
Benzo[j]fluoranthene	Same	205-82-3
Benzo(k)fluoranthene (5/96)	Same	207-08-9
Benzo[a]pyrene	Same	50-32-8
p-Benzquinone	2,5-Cyclohexadiene-1,4-dione	106-51-4

Appendix VIII Hazardous Constituents		
Common name	Chemical abstracts name (9/98)	CAS #
Benzotrichloride	Benzene, (trichloromethyl)-	98-07-7
Benzyl chloride	Benzene, (chloromethyl)-	100-44-7
Beryllium powder	Same	7440-41-7
Beryllium compounds, N.O.S. ¹		
Bis (pentamethylene)-thiuram tetrasulfide.	Piperidine, 1,1'-(tetrathiodicarbonothioyl)-bis-	120-54-7
Bromoacetone	2-Propanone, 1-bromo-	598-31-2
Bromoform	Methane, tribromo-	75-25-2
4-Bromophenyl phenyl ether	Benzene, 1-bromo-4-phenoxy-	101-55-3
Brucine	Strychnidin-10-one, 2,3-dimethoxy-	357-57-3
Butyl benzyl phthalate	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester	85-68-7
Butylate (5/96)	Carbamothioic acid, bis (2-methylpropyl)-, S-ethyl ester	2008-41-5
Cacodylic acid	Arsinic acid, dimethyl-	75-60-5
Cadmium	Same	7440-43-9
Cadmium compounds, N.O.S. ¹		
Calcium chromate	Chromic acid H ₂ CrO ₄ , calcium salt	13765-19-0
Calcium cyanide	Calcium cyanide Ca(CN) ₂	592-01-8
Carbaryl (5/96)	1-Naphthalenol, methylcarbamate	63-25-2
Carbendazim (5/96)	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester	10605-21-7
Carbofuran (5/96)	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate	1563-66-2
Carbofuran phenol (9/96)	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-	1563-38-8
Carbon disulfide	Same	75-15-0
Carbon oxyfluoride	Carbonic difluoride	353-50-4
Carbon tetrachloride	Methane, tetrachloro-	56-23-5
Carbosulfan (6/96)	Carbamic acid, [(diethylamino) thio] methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester	55285-14-8
Chloral	Acetaldehyde, trichloro-	75-87-6
Chlorambucil	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-	305-03-3
Chlordane	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	57-74-9
Chlordane (alpha and gamma isomers)		
Chlorinated benzenes, N.O.S. ¹		
Chlorinated ethane, N.O.S. ¹		
Chlorinated fluorocarbons, N.O.S. ¹		
Chlorinated naphthalene, N.O.S. ¹		
Chlorinated phenol, N.O.S. ¹		
Chlornaphazin	Naphthalenamine, N,N'-bis(2-chloroethyl)-	494-03-1
Chloroacetaldehyde	Acetaldehyde, chloro-	107-20-0
Chloroalkyl ethers, N.O.S. ¹		
p-Chloroaniline	Benzenamine, 4-chloro-	106-47-8
Chlorobenzene	Benzene, chloro-	108-90-7
Chlorobenzilate	Benzenecetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester	510-15-6
p-Chloro-m-cresol	Phenol, 4-chloro-3-methyl-	59-50-7
2-Chloroethyl vinyl ether	Ethene, (2-chloroethoxy)-	110-75-8
Chloroform	Methane, trichloro-	67-66-3
Chloromethyl methyl ether	Methane, chloromethoxy-	107-30-2
beta-Chloronaphthalene	Naphthalene, 2-chloro-	91-58-7
o-Chlorophenol	Phenol, 2-chloro-	95-57-8
1-(o-Chlorophenyl)thiourea	Thiourea, (2-chlorophenyl)-	5344-82-1
Chloroprene	1,3-Butadiene, 2-chloro-	126-99-8
3-Chloropropionitrile	Propanenitrile, 3-chloro-	542-76-7
Chromium	Same	7440-47-3
Chromium compounds, N.O.S. ¹		
Chrysene	Same	218-01-9
Citrus red No. 2	2-Naphthalenol, 1-[(2,5-dimethoxyphenyl)azo]-	6358-53-8
Coal tar creosote	Same	8007-45-2
Copper cyanide	Copper cyanide CuCN	544-92-3
Copper dimethyldithiocarbamate	Copper, bis(dimethylcarbamodithioato-S,S')-, (6/96)	137-29-1
Creosote	Same	

Appendix VIII Hazardous Constituents		
Common name	Chemical abstracts name (9/98)	CAS #
Cresol (Cresylic acid)	Phenol, methyl-	1319-77-3
Crotonaldehyde	2-Butenal	4170-30-3
m-Cumenyl methylcarbamate	Phenol, 3-(methylethyl)-, methyl carbamate (5/96)	64-00-6
Cyanides (soluble salts and complexes) N.O.S. ¹		
Cyanogen	Ethanedinitrile	460-19-5
Cyanogen bromide	Cyanogen bromide (CN)Br	506-68-3
Cyanogen chloride	Cyanogen chloride (CN)Cl	506-77-4
Cycasin	beta-D-Glucopyranoside, (methyl-ONN-azoxy)methyl	14901-08-7
Cycloate	Carbamothioic acid, cyclohexylethyl-, S-ethyl ester	1134-23-2
2-Cyclohexyl-4,6-dinitrophenol	Phenol, 2-cyclohexyl-4,6-dinitro-	131-89-5
Cyclophosphamide	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide	50-18-0
2,4-D	Acetic acid, (2,4-dichlorophenoxy)-	94-75-7
2,4-D, salts, esters		
Daunomycin	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-	20830-81-3
Dazomet (5/96)	2H-1,3,5-thiadiazine-2-thione,tetrahydro-3,5-dimethyl	533-74-4
DDD	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-	72-54-8
DDE	Benzene, 1,1'-(dichloroethenylidene)bis[4-chloro-	72-55-9
DDT	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-	50-29-3
Diallate	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	2303-16-4
Dibenz[a,h]acridine	Same	226-36-8
Dibenz[a,j]acridine	Same	224-42-0
Dibenz[a,h]anthracene	Same	53-70-3
7H-Dibenzo[c,g]carbazole	Same	194-59-2
Dibenzo[a,e]pyrene	Naphtho[1,2,3,4-def]chrysene	192-65-4
Dibenzo[a,h]pyrene	Dibenzo[b,def]chrysene	189-64-0
Dibenzo[a,i]pyrene	Benzo[rst]pentaphene	189-55-9
1,2-Dibromo-3-chloropropane	Propane, 1,2-dibromo-3-chloro-	96-12-8
Dibutyl phthalate	1,2-Benzenedicarboxylic acid, dibutyl ester	84-74-2
o-Dichlorobenzene	Benzene, 1,2-dichloro-	95-50-1
m-Dichlorobenzene	Benzene, 1,3-dichloro-	541-73-1
p-Dichlorobenzene	Benzene, 1,4-dichloro-	106-46-7
Dichlorobenzene, N.O.S. ¹	Benzene, dichloro-	25321-22-6
3,3'-Dichlorobenzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-	91-94-1
1,4-Dichloro-2-butene	2-Butene, 1,4-dichloro-	764-41-0
Dichlorodifluoromethane	Methane, dichlorodifluoro-	75-71-8
Dichloroethylene, N.O.S. ¹	Dichloroethylene	25323-30-2
1,1-Dichloroethylene	Ethene, 1,1-dichloro-	75-35-4
1,2-Dichloroethylene	Ethene, 1,2-dichloro-, (E)-	156-60-5
Dichloroethyl ether	Ethane, 1,1'-oxybis[2-chloro-	111-44-4
Dichloroisopropyl ether	Propane, 2,2'-oxybis[2-chloro-	108-60-1
Dichloromethoxy ethane	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-	111-91-1
Dichloromethyl ether	Methane, oxybis[chloro-	542-88-1
2,4-Dichlorophenol	Phenol, 2,4-dichloro-	120-83-2
2,6-Dichlorophenol	Phenol, 2,6-dichloro-	87-65-0
Dichlorophenylarsine	Arsonous dichloride, phenyl-	696-28-6
Dichloropropane, N.O.S. ¹	Propane, dichloro-	26638-19-7
Dichloropropanol, N.O.S. ¹	Propanol, dichloro-	26545-73-3
Dichloropropene, N.O.S. ¹	1-Propene, dichloro-	26952-23-8
1,3-Dichloropropene	1-Propene, 1,3-dichloro-	542-75-6
Dieldrin	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)-	60-57-1
1,2:3,4-Diepoxybutane	2,2'-Bioxirane	1464-53-5
Diethylarsine	Arsine, diethyl-	692-42-2
Diethylene glycol, dicarbamate (5/96)	Ethanol, 2,2'-oxybis-, dicarbamate	5952-26-1
1,4-Diethyleneoxide	1,4-Dioxane	123-91-1
Diethylhexyl phthalate	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	117-81-7
N,N'-Diethylhydrazine	Hydrazine, 1,2-diethyl-	1615-80-1

Appendix VIII Hazardous Constituents		
Common name	Chemical abstracts name (9/98)	CAS #
O,O-Diethyl S-methyl dithiophosphate	Phosphorodithioic acid, O,O-diethyl S-methyl ester	3288-58-2
Diethyl-p-nitrophenyl phosphate	Phosphoric acid, diethyl 4-nitrophenyl ester	311-45-5
Diethyl phthalate	1,2-Benzenedicarboxylic acid, diethyl ester	84-66-2
O,O-Diethyl O-pyrazinyl phosphoro- thioate	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	297-97-2
Diethylstilbestrol	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-	56-53-1
Dihydrosafrole	1,3-Benzodioxole, 5-propyl-	94-58-6
Diisopropylfluorophosphate (DFP)	Phosphorofluoridic acid, bis(1-methylethyl) ester	55-91-4
Dimethoate	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester	60-51-5
3,3'-Dimethoxybenzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-	119-90-4
p-Dimethylaminoazobenzene	Benzenamine, N,N-dimethyl-4-(phenylazo)-	60-11-7
7,12-Dimethylbenz[a]anthracene	Benz[a]anthracene, 7,12-dimethyl-	57-97-6
3,3'-Dimethylbenzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-	119-93-7
Dimethylcarbamoyl chloride	Carbamic chloride, dimethyl-	79-44-7
1,1-Dimethylhydrazine	Hydrazine, 1,1-dimethyl-	57-14-7
1,2-Dimethylhydrazine	Hydrazine, 1,2-dimethyl-	540-73-8
alpha,alpha-Dimethylphenethylamine	Benzenethanamine, alpha,alpha-dimethyl-	122-09-8
2,4-Dimethylphenol	Phenol, 2,4-dimethyl-	105-67-9
Dimethyl phthalate	1,2-Benzenedicarboxylic acid, dimethyl ester	131-11-3
Dimethyl sulfate	Sulfuric acid, dimethyl ester	77-78-1
Dimetilan (5/96)	Carbamic acid, dimethyl-, 1-[(dimethylamino) carbonyl]-5-methyl-1H-pyrazol-3-yl ester	644-64-4
Dinitrobenzene, N.O.S. ¹	Benzene, dinitro-	25154-54-5
4,6-Dinitro-o-cresol	Phenol, 2-methyl-4,6-dinitro-	534-52-1
4,6-Dinitro-o-cresol salts		
2,4-Dinitrophenol	Phenol, 2,4-dinitro-	51-28-5
2,4-Dinitrotoluene	Benzene, 1-methyl-2,4-dinitro-	121-14-2
2,6-Dinitrotoluene	Benzene, 2-methyl-1,3-dinitro-	606-20-2
Dinoseb	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	88-85-7
Di-n-octyl phthalate	1,2-Benzenedicarboxylic acid, dioctyl ester	117-84-0
Diphenylamine	Benzenamine, N-phenyl-	122-39-4
1,2-Diphenylhydrazine	Hydrazine, 1,2-diphenyl-	122-66-7
Di-n-propylnitrosamine	1-Propanamine, N-nitroso-N-propyl-	621-64-7
Disulfiram (5/96)	Thioperoxydicarbonic diamide, tetraethyl	97-77-8
Disulfoton	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester	298-04-4
Dithiobiuret	Thioimidodicarbonic diamide [(H ₂ N)C(S)] ₂ NH	541-53-7
Endosulfan	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide	115-29-7
Endothall	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	145-73-3
Endrin	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)-	72-20-8
Endrin metabolites		
Epichlorohydrin	Oxirane, (chloromethyl)-	106-89-8
Epinephrine	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-	51-43-4
EPTC	Carbamothioic acid, dipropyl-, S-ethyl ester	759-94-4
Ethyl carbamate (urethane)	Carbamic acid, ethyl ester	51-79-6
Ethyl cyanide	Propanenitrile	107-12-0
Ethylenebisdithiocarbamic acid	Carbamodithioic acid, 1,2-ethanediylbis-	111-54-6
Ethylenebisdithiocarbamic acid, salts and esters		
Ethylene dibromide	Ethane, 1,2-dibromo-	106-93-4
Ethylene dichloride	Ethane, 1,2-dichloro-	107-06-2
Ethylene glycol monoethyl ether	Ethanol, 2-ethoxy-	110-80-5
Ethyleneimine	Aziridine	151-56-4
Ethylene oxide	Oxirane	75-21-8
Ethylenethiourea	2-Imidazolidinethione	96-45-7
Ethylidene dichloride	Ethane, 1,1-dichloro-	75-34-3

Appendix VIII Hazardous Constituents		
Common name	Chemical abstracts name (9/98)	CAS #
Ethyl methacrylate	2-Propenoic acid, 2-methyl-, ethyl ester	97-63-2
Ethyl methanesulfonate	Methanesulfonic acid, ethyl ester	62-50-0
Ethyl Ziram (5/96)	Zinc, bis(diethylcarbamodithioato-S,S')-	14324-55-1
Famphur	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester	52-85-7
Ferbam (5/96)	Iron, tris(dimethylcarbamodithioat-S,S')-,	14484-64-1
Fluoranthene	Same	206-44-0
Fluorine	Same	7782-41-4
Fluoroacetamide	Acetamide, 2-fluoro-	640-19-7
Fluoroacetic acid, sodium salt	Acetic acid, fluoro-, sodium salt	62-74-8
Formaldehyde	Same	50-00-0
Formetanate hydrochloride	Methanimidamide, N,N-dimethyl-N'-[3-[(methylamino) carbonyl]oxy]phenyl]-, monohydrochloride (5/96)	23422-53-9
Formic acid	Same	64-18-6
Formparanate (5/96)	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[(methylamino) carbonyl]oxy]phenyl]-.	17702-57-7
Glycidylaldehyde	Oxiranecarboxyaldehyde	765-34-4
Halomethanes, N.O.S. ¹		
Heptachlor	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	76-44-8
Heptachlor epoxide	2,5-Methano-2H-indeno[1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexa- hydro-, (1aalpha,1bbeta,2alpha,5alpha,5abeta,6beta,6aalpha)-	1024-57-3
Heptachlor epoxide (alpha, beta, and gamma isomers)		
Heptachlorodibenzofurans	(5/96)	
Heptachlorodibenzo-p-dioxins	(5/96)	
Hexachlorobenzene	Benzene, hexachloro-	118-74-1
Hexachlorobutadiene	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	87-68-3
Hexachlorocyclopentadiene	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	77-47-4
Hexachlorodibenzo-p-dioxins		
Hexachlorodibenzofurans		
Hexachloroethane	Ethane, hexachloro-	67-72-1
Hexachlorophene	Phenol, 2,2'-methylenebis[3,4,6-trichloro-	70-30-4
Hexachloropropene	1-Propene, 1,1,2,3,3,3-hexachloro-	1888-71-7
Hexaethyl tetraphosphate	Tetraphosphoric acid, hexaethyl ester	757-58-4
Hydrazine	Same	302-01-2
Hydrogen cyanide	Hydrocyanic acid	74-90-8
Hydrogen fluoride	Hydrofluoric acid	7664-39-3
Hydrogen sulfide	Hydrogen sulfide H ₂ S	7783-06-4
Indeno[1,2,3-cd]pyrene	Same	193-39-5
3-Iodo-2-propynyl n-butylcarbamate (5/96)	Carbamic acid, butyl-, 3-iodo-2-propynyl ester	55406-53-6
Isobutyl alcohol	1-Propanol, 2-methyl-	78-83-1
Isodrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta,-8abeta) -	465-73-6
Isolan (5/96)	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester	119-38-0
Isosafrole	1,3-Benzodioxole, 5-(1-propenyl)-	120-58-1
Kepone	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro-	143-50-0
Lasiocarpine	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*,3R*),7aalpha]]-	303-34-1
Lead	Same	7439-92-1
Lead compounds, N.O.S. ¹		
Lead acetate	Acetic acid, lead(2+) salt	301-04-2
Lead phosphate	Phosphoric acid, lead(2+) salt (2:3)	7446-27-7
Lead subacetate	Lead, bis(acetato-O)tetrahydroxytri-	1335-32-6
Lindane	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)-	58-89-9
Maleic anhydride	2,5-Furandione	108-31-6
Maleic hydrazide	3,6-Pyridazinedione, 1,2-dihydro-	123-33-1

Appendix VIII Hazardous Constituents		
Common name	Chemical abstracts name (9/98)	CAS #
Malononitrile	Propanedinitrile	109-77-3
Manganese dimethyldithiocarbamate (5/96)	Manganese, bis(dimethylcarbamo-dithioato-S,S')-,	15339-36-3
Melphalan	L-Phenylalanine, 4-[bis(2-chloroethyl)aminol]-	148-82-3
Mercury	Same	7439-97-6
Mercury compounds, N.O.S. ¹		
Mercury fulminate	Fulminic acid, mercury(2+) salt	628-86-4
Metam Sodium (5/96)	Carbamodithioic acid, methyl-, monosodium salt	137-42-8
Methacrylonitrile	2-Propenenitrile, 2-methyl-	126-98-7
Methapyrilene	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-	91-80-5
Methiocarb (5/96)	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate	2032-65-7
Methomyl	Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester	16752-77-5
Methoxychlor	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-	72-43-5
Methyl bromide	Methane, bromo-	74-83-9
Methyl chloride	Methane, chloro-	74-87-3
Methyl chlorocarbonate	Carbonochloridic acid, methyl ester	79-22-1
Methyl chloroform	Ethane, 1,1,1-trichloro-	71-55-6
3-Methylcholanthrene	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	56-49-5
4,4'-Methylenebis (2-chloroaniline)	Benzenamine, 4,4'-methylenebis[2-chloro-	101-14-4
Methylene bromide	Methane, dibromo-	74-95-3
Methylene chloride	Methane, dichloro-	75-09-2
Methyl ethyl ketone (MEK)	2-Butanone	78-93-3
Methyl ethyl ketone peroxide	2-Butanone, peroxide	1338-23-4
Methyl hydrazine	Hydrazine, methyl-	60-34-4
Methyl iodide	Methane, iodo-	74-88-4
Methyl isocyanate	Methane, isocyanato-	624-83-9
2-Methylactonitrile	Propanenitrile, 2-hydroxy-2-methyl-	75-86-5
Methyl methacrylate	2-Propenoic acid, 2-methyl-, methyl ester	80-62-6
Methyl methanesulfonate	Methanesulfonic acid, methyl ester	66-27-3
Methyl parathion	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	298-00-0
Methylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	56-04-2
Metolcarb (5/96)	Carbamic acid, methyl-, 3-methylphenyl ester	1129-41-5
Mexacarbate (5/96)	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)	315-18-4
Mitomycin C	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5- methyl-, [1aS-(1aalpha,8beta,8aalpha,8balpha)]-	50-07-7
MNNG	Guanidine, N-methyl-N'-nitro-N-nitroso-	70-25-7
Molinate (5/96)	1H-Azepine-1-carbothioic acid, hexahydro-, S-ethyl ester	2212-67-1
Mustard gas	Ethane, 1,1'-thiobis[2-chloro-	505-60-2
Naphthalene	Same	91-20-3
1,4-Naphthoquinone	1,4-Naphthalenedione	130-15-4
alpha-Naphthylamine	1-Naphthalenamine	134-32-7
beta-Naphthylamine	2-Naphthalenamine	91-59-8
alpha-Naphthylthiourea	Thiourea, 1-naphthalenyl-	86-88-4
Nickel	Same	7440-02-0
Nickel compounds, N.O.S. ¹		
Nickel carbonyl	Nickel carbonyl Ni(CO) ₄ , (T-4)-	13463-39-3
Nickel cyanide	Nickel cyanide Ni(CN) ₂	557-19-7
Nicotine	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-	54-11-5
Nicotine salts		
Nitric oxide	Nitrogen oxide NO	10102-43-9
p-Nitroaniline	Benzenamine, 4-nitro-	100-01-6
Nitrobenzene	Benzene, nitro-	98-95-3
Nitrogen dioxide	Nitrogen oxide NO ₂	10102-44-0
Nitrogen mustard	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-	51-75-2
Nitrogen mustard, hydrochloride salt		
Nitrogen mustard N-oxide	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-, N-oxide	126-85-2
Nitrogen mustard, N-oxide, hydrochloride salt		

Appendix VIII Hazardous Constituents		
Common name	Chemical abstracts name (9/98)	CAS #
Nitroglycerin	1,2,3-Propanetriol, trinitrate	55-63-0
p-Nitrophenol	Phenol, 4-nitro-	100-02-7
2-Nitropropane	Propane, 2-nitro-	79-46-9
Nitrosamines, N.O.S. ¹		35576-91-1D
N-Nitrosodi-n-butylamine	1-Butanamine, N-butyl-N-nitroso-	924-16-3
N-Nitrosodiethanolamine	Ethanol, 2,2'-(nitrosoimino)bis-	1116-54-7
N-Nitrosodiethylamine	Ethanamine, N-ethyl-N-nitroso-	55-18-5
N-Nitrosodimethylamine	Methanamine, N-methyl-N-nitroso-	62-75-9
N-Nitroso-N-ethylurea	Urea, N-ethyl-N-nitroso-	759-73-9
N-Nitrosomethylethylamine	Ethanamine, N-methyl-N-nitroso-	10595-95-6
N-Nitroso-N-methylurea	Urea, N-methyl-N-nitroso-	684-93-5
N-Nitroso-N-methylurethane	Carbamic acid, methylnitroso-, ethyl ester	615-53-2
N-Nitrosomethylvinylamine	Vinylamine, N-methyl-N-nitroso-	4549-40-0
N-Nitrosomorpholine	Morpholine, 4-nitroso-	59-89-2
N-Nitrosornicotine	Pyridine, 3-(1-nitroso-2-pyrrolidinyl)-, (S)-	16543-55-8
N-Nitrosopiperidine	Piperidine, 1-nitroso-	100-75-4
N-Nitrosopyrrolidine	Pyrrolidine, 1-nitroso-	930-55-2
N-Nitrososarcosine	Glycine, N-methyl-N-nitroso-	13256-22-9
5-Nitro-o-toluidine	Benzenamine, 2-methyl-5-nitro-	99-55-8
Octachlorodibenzo-p-dioxin (OCDD)	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (7/02)	
Octachlorodibenzofuran(OCDF)	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (7/02)	
Octamethylpyrophos-phoramide	Diphosphoramide, octamethyl-	152-16-9
Osmium tetroxide	Osmium oxide OsO ₄ , (T-4)-	20816-12-0
Oxamyl (5/96)	Ethanimidothioic acid, 2-(dimethylamino)-N-[[[(methylamino)carbonyl]oxy]-2-oxo-, methyl ester	23135-22-0
Paraldehyde	1,3,5-Trioxane, 2,4,6-trimethyl-	123-63-7
Parathion	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	56-38-2
Pebulate	Carbamothioic acid, butylethyl-, S-propyl ester	1114-71-2
Pentachlorobenzene	Benzene, pentachloro-	608-93-5
Pentachlorodibenzo-p-dioxins		
Pentachlorodibenzofurans		
Pentachloroethane	Ethane, pentachloro-	76-01-7
Pentachloronitrobenzene (PCNB)	Benzene, pentachloronitro-	82-68-8
Pentachlorophenol	Phenol, pentachloro-	87-86-5
Phenacetin	Acetamide, N-(4-ethoxyphenyl)-	62-44-2
Phenol	Same	108-95-2
Phenylenediamine	Benzenediamine	25265-76-3
Phenylmercury acetate	Mercury, (acetato-O)phenyl-	62-38-4
Phenylthiourea	Thiourea, phenyl-	103-85-5
Phosgene	Carbonic dichloride	75-44-5
Phosphine	Same	7803-51-2
Phorate	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester	298-02-2
Phthalic acid esters, N.O.S. ¹		
Phthalic anhydride	1,3-Isobenzofurandione	85-44-9
Physostigmine (5/96)	Pyrrolo[2,3-b]indol-5-01, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-	57-47-6
Physostigmine salicylate (5/96)	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis) -1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo [2,3-b]indol-5-yl methylcarbamate ester (1:1).	57-64-7
2-Picoline	Pyridine, 2-methyl-	109-06-8
Polychlorinated biphenyls, N.O.S. ¹		
Potassium cyanide	Potassium cyanide K(CN)	151-50-8
Potassium dimethyldithiocarbamate (5/96)	Carbamodithioic acid, dimethyl, potassium salt	128-03-0
Potassium n-hydroxymethyl-n-methyl-dithiocarbamate	Carbamodithioic acid, (hydroxymethyl)methyl-, monopotassium salt	51026-28-9
Potassium n-methyldithiocarbamate (5/96)	Carbamodithioic acid, methyl-monopotassium salt	137-41-7
Potassium pentachlorophenate	Pentachlorophenol, potassium salt	7778736

Appendix VIII Hazardous Constituents		
Common name	Chemical abstracts name (9/98)	CAS #
Potassium silver cyanide	Argentate(1-), bis(cyano-C)-, potassium	506-61-6
Promecarb (5/96)	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate	2631-37-0
Pronamide	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	23950-58-5
1,3-Propane sultone	1,2-Oxathiolane, 2,2-dioxide	1120-71-4
n-Propylamine	1-Propanamine	107-10-8
Propargyl alcohol	2-Propyn-1-ol	107-19-7
Propham	Carbamic acid, phenyl-, 1-methylethyl ester	122-42-9
Propoxur	Phenol, 2-(1-methylethoxy)-, methylcarbamate	114-26-1
Propylene dichloride	Propane, 1,2-dichloro-	78-87-5
1,2-Propylenimine	Aziridine, 2-methyl-	75-55-8
Propylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-propyl-2-thioxo-	51-52-5
Prosulfocarb	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester	52888-80-9
Pyridine	Same	110-86-1
Reserpine	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-smethyl ester, (3beta,16beta,17alpha,18beta,20alpha)-	50-55-5
Resorcinol	1,3-Benzenediol	108-46-3
Saccharin	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide	81-07-2
Saccharin salts		
Safrole	1,3-Benzodioxole, 5-(2-propenyl)-	94-59-7
Selenium	Same	7782-49-2
Selenium compounds, N.O.S. ¹		
Selenium dioxide	Selenious acid	7783-00-8
Selenium sulfide	Selenium sulfide SeS ₂	7488-56-4
Selenium, tetrakis (dimethyl-dithiocarbamate.	Carbamodithioic acid, dimethyl-, tetraanhydrosulfide with orthothioselenious acid.	144-34-3
Selenourea	Same	630-10-4
Silver	Same	7440-22-4
Silver compounds, N.O.S. ¹		
Silver cyanide	Silver cyanide Ag(CN)	506-64-9
Silvex (2,4,5-TP)	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	93-72-1
Sodium cyanide	Sodium cyanide Na(CN)	143-33-9
Sodium dibutylthiocarbamate	Carbamodithioic acid, dibutyl, sodium salt (5/96)	136-30-1
Sodium diethylthiocarbamate	Carbamodithioic acid, diethyl-, sodium salt (5/96)	148-18-5
Sodium dimethylthiocarbamate	Carbamodithioic acid, dimethyl-, sodium salt (5/96)	128-04-1
Sodium pentachlorophenate	Pentachlorophenol, sodium salt	131522
Streptozotocin	D-Glucose, 2-deoxy-2-[[[(methylnitrosoamino)carbonyl]amino]-	18883-66-4
Strychnine	Strychnidin-10-one	57-24-9
Strychnine salts		
Sulfallate (5/96)	Carbamodithioic acid, diethyl-, 2-chloro-2-propenyl ester	95-06-7
TCDD	Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro-	1746-01-6
Tetrabutylthiuram disulfide	Thioperoxydicarbonic diamide, tetrabutyl (5/96)	1634-02-2
1,2,4,5-Tetrachlorobenzene	Benzene, 1,2,4,5-tetrachloro-	95-94-3
Tetrachlorodibenzo-p-dioxins		
Tetrachlorodibenzofurans		
Tetrachloroethane, N.O.S. ¹	Ethane, tetrachloro-, N.O.S.	25322-20-7
1,1,1,2-Tetrachloroethane	Ethane, 1,1,1,2-tetrachloro-	630-20-6
1,1,2,2-Tetrachloroethane	Ethane, 1,1,2,2-tetrachloro-	79-34-5
Tetrachloroethylene	Ethene, tetrachloro-	127-18-4
2,3,4,6-Tetrachlorophenol	Phenol, 2,3,4,6-tetrachloro-	58-90-2
2,3,4,6-tetrachlorophenol, potassium salt	same	53535276
2,3,4,6-tetrachlorophenol, sodium salt	same	25567559
Tetraethylthiopyrophos-phate	Thiodiphosphoric acid, tetraethyl ester	3689-24-5
Tetraethyl lead	Plumbane, tetraethyl-	78-00-2
Tetraethyl pyrophosphate	Diphosphoric acid, tetraethyl ester	107-49-3
Tetramethylthiuram monosulfide	Bis(dimethylthiocarbamoyl) sulfide	97-74-5
Tetranitromethane	Methane, tetranitro-	509-14-8
Thallium	Same	7440-28-0
Thallium compounds, N.O.S. ¹		

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Common name	Chemical abstracts name (9/98)	CAS #
Thallic oxide	Thallium oxide Tl_2O_3	1314-32-5
Thallium(I) acetate	Acetic acid, thallium(1+) salt	563-68-8
Thallium(I) carbonate	Carbonic acid, dithallium(1+) salt	6533-73-9
Thallium(I) chloride	Thallium chloride $TlCl$	7791-12-0
Thallium(I) nitrate	Nitric acid, thallium(1+) salt	10102-45-1
Thallium selenite	Selenious acid, dithallium(1+) salt	12039-52-0
Thallium(I) sulfate	Sulfuric acid, dithallium(1+) salt	7446-18-6
Thioacetamide	Ethanethioamide	62-55-5
Thiodicarb (5/96)	Ethanimidothioic acid, N,N'-[thiobis [(methylimino) carbonyloxy]] bis-, dimethyl ester.	59669-26-0
Thiofanox	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[(methylamino)carbonyl] oxime	39196-18-4
Thiomethanol	Methanethiol	74-93-1
Thiophanate-methyl	Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl)] bis-, dimethyl ester	23564-05-8
Thiophenol	Benzenethiol	108-98-5
Thiosemicarbazide	Hydrazinecarbothioamide	79-19-6
Thiourea	Same	62-56-6
Thiram	Thioperoxydicarbonic diamide $[(H_2N)C(S)]_2S_2$, tetramethyl-	137-26-8
Tirpate (5/96)	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino) carbonyl] oxime.	26419-73-8
Toluene	Benzene, methyl-	108-88-3
Toluenediamine	Benzenediamine, ar-methyl-	25376-45-8
Toluene-2,4-diamine	1,3-Benzenediamine, 4-methyl-	95-80-7
Toluene-2,6-diamine	1,3-Benzenediamine, 2-methyl-	823-40-5
Toluene-3,4-diamine	1,2-Benzenediamine, 4-methyl-	496-72-0
Toluene diisocyanate	Benzene, 1,3-diisocyanatomethyl-	26471-62-5
o-Toluidine	Benzenamine, 2-methyl-	95-53-4
o-Toluidine hydrochloride	Benzenamine, 2-methyl-, hydrochloride	636-21-5
p-Toluidine	Benzenamine, 4-methyl-	106-49-0
Toxaphene	Same	8001-35-2
Triallate (5/96)	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester	2303-17-5
2,4,6-Tribromophenol. (11/99)	Tribromophenol., 2,4,6-	118-79-6
Tributyltin	Tributylstannane (6/02)	688-73-3
Tributyltin Oxide	Bis(tri-n-butyltin) Oxide (6/02)	56-35-9
Tributyltin Chloride	Tributylchlorostannane (6/02)	1461-22-9
Tributyltin Hydroxide	Tributylhydroxystannane (6/02)	1067-97-6
Tributyltin Bromide	Tributylbromostannane (6/02)	1461-23-0
Tributyltin Acetate	(acetyloxy)tributylstannane (6/02)	56-36-0
Tributyltin Fluoride	Tributylfluorostannane (6/02)	1983-23-0
Triethyltin	Triethylstannane (6/02)	997-50-2
Triethyltin Chloride	Triethyltin Chloride (6/02)	994-31-0
1,2,4-Trichlorobenzene	Benzene, 1,2,4-trichloro-	120-82-1
1,1,2-Trichloroethane	Ethane, 1,1,2-trichloro-	79-00-5
Trichloroethylene	Ethene, trichloro-	79-01-6
Trichloromethanethiol	Methanethiol, trichloro-	75-70-7
Trichloromonofluoromethane	Methane, trichlorofluoro-	75-69-4
2,4,5-Trichlorophenol	Phenol, 2,4,5-trichloro-	95-95-4
2,4,6-Trichlorophenol	Phenol, 2,4,6-trichloro-	88-06-2
2,4,5-T	Acetic acid, (2,4,5-trichlorophenoxy)-	93-76-5
Trichloropropane, N.O.S. ¹		25735-29-9
1,2,3-Trichloropropane	Propane, 1,2,3-trichloro-	96-18-4
Triethylamine (5/96)	Ethanamine, N,N-diethyl-	121-44-8
O,O,O-Triethyl phosphorothioate	Phosphorothioic acid, O,O,O-triethyl ester	126-68-1
1,3,5-Trinitrobenzene	Benzene, 1,3,5-trinitro-	99-35-4
Tris(1-aziridinyl)phosphine sulfide	Aziridine, 1,1',1''-phosphinothioylidynetris-	52-24-4
Tris(2,3-dibromopropyl) phosphate	1-Propanol, 2,3-dibromo-, phosphate (3:1)	126-72-7
Trypan blue	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'diyl)bis(azo)]- bis[5-amino-4-hydroxy-, tetrasodium salt	72-57-1

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Common name	Chemical abstracts name (9/98)	CAS #
Uracil mustard	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-	66-75-1
Vanadium pentoxide	Vanadium oxide V ₂ O ₅	1314-62-1
Vernolate (5/96)	Carbamothioc acid, dipropyl-, S-propyl ester	1929-77-7
Vinyl chloride	Ethene, chloro-	75-01-4
Warfarin	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations less than 0.3%	81-81-2
Warfarin	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations greater than 0.3%	81-81-2
Warfarin salts, when present at concentrations less than 0.3%		
Warfarin salts, when present at concentrations greater than 0.3%		
Zinc cyanide	Zinc cyanide Zn(CN) ₂	557-21-1
Zinc phosphide	Zinc phosphide Zn ₃ P ₂ , when present at concentrations greater than 10%	1314-84-7
Zinc phosphide	Zinc phosphide Zn ₃ P ₂ , when present at concentrations of 10% or less	1314-84-7
Ziram	Zinc, bis(dimethylcarbamodithioato-S,S')-, (T-4)-	137-30-4

¹The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class not specifically listed by name in this appendix.

Appendix IX Wastes Excluded under 260.20 & 260.22

Table 1 Wastes Excluded From Non-Specific Sources

Facility	Address	Waste description
Aluminum Co of America...	750 Norcold Ave., Sidney, Ohio 45365.	Wastewater treatment plant (WWTP) sludges generated from the chemical conversion coating of aluminum (EPA Hazardous Waste No. F019) and WWTP sludges generated from electroplating operations (EPA Hazardous Waste No. F006) and stored in an on-site landfill. This is an exclusion for approximately 16,772 cubic yards of landfilled WWTP filter cake. This exclusion applies only if the waste filter cake remains in place or, if excavated, is disposed of in a Subtitle D landfill which is permitted, licensed, or registered by a state to manage industrial solid waste. This exclusion was published on April 6, 1999.
		1. The constituent concentrations measured in the TCLP extract may not exceed the following levels (mg/L):
		Arsenic-5; Barium-100;
		Chromium-5; Cobalt-210;
		Copper-130; Nickel-70;
		Vanadium-30; Zinc-1000;
		Fluoride-400; Acetone-400;
		Methylene Chloride-0.5;
		Bis(2-ethylhexyl)phthalate-0.6.
		2. (a) If, anytime after disposal of the delisted waste, Alcoa possesses
		or is otherwise made aware of any environmental data (including but not limited to leachate data or groundwater monitoring data) or any other data relevant to the delisted waste indicating that any constituent identified in Condition (1) is at a level in the leachate higher than the delisting level established in Condition (1), or is
		at a level in the ground water or soil higher than the health based level, then Alcoa must report such data, in writing, to the Regional Administrator within 10 days of first possessing or being made aware of that data.
		(b) Based on the information described in paragraph (a) and any other

		information received from any source, the Regional Administrator will make a preliminary determination as to whether the reported information requires Agency action to protect human health or the environment. Further action may include suspending or revoking this exclusion, or other appropriate response necessary to protect human health and the environment.
		(c) If the Regional Administrator determines that the reported information does require Agency action, the Regional Administrator will notify the facility in writing of the actions the Regional Administrator believes are necessary to protect human health and the environment. The notice shall include a statement of the proposed action and a statement providing the facility with an opportunity to present information as to why the proposed Agency action is not necessary or to suggest an alternative action. The facility shall have 10 days from the date of the Regional Administrator's notice to present such information.
		(d) Following the receipt of information from the facility described in paragraph (c) or (if no information is presented under paragraph (c) the initial receipt of information described in paragraph (a), the Regional Administrator will issue a final written determination describing the Agency actions that are necessary to protect human health or the environment. Any required action described in the Regional Administrator's determination shall become effective immediately, unless the Regional Administrator provides otherwise.
Alumnitec, Inc. - formerly Profile Extrusion Co., formerly United Technologies	Jeffersonville IN	Dewatered wastewater treatment sludge (EPA Hazardous Waste No. F019) generated from the chemical conversion of aluminum after April 29, 1986.
Automotive, Inc American Steel Cord.....	Scottsburg, IN..	Wastewater treatment plant (WWTP) sludge from electroplating operations (EPA Hazardous Waste No.

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		F006) generated at a maximum annual rate of 3,000 cubic yards per year, after January 26, 1999, and disposed of in a Subtitle D landfill.
		1. Verification Testing: American Steel Cord must implement an annual testing program to demonstrate, based on the analysis of a minimum of four representative samples, that the constituent concentrations measured in the TCLP extract of the waste are within specific levels. The constituent concentrations must not exceed the following levels (mg/l) which are back-calculated from the delisting health-based levels and a DAF of 68. Arsenic-3.4; Barium-100; Cadmium-.34; Chromium-5; Copper-88.4; Lead-1.02; Mercury-.136; Nickel-6.8; Selenium-1; Silver-5; Zinc-680; Cyanide-13.6; Acetone-272; Benzo butyl phthlate-476; Chloroform-.68; 1,4-Dichlorobenzene-.272; cis-1,2-Dichloroethene-27.2; Methylene chloride-.34; Naphthalene-68; Styrene-6.8; Tetrachloroethene-.34; Toluene-68; and Xylene-680. American Steel Cord must measure and record the pH of the waste using SW 846 method 9045 and must record all pH measurements performed in accordance with the TCLP.
		2. Changes in Operating Conditions: If American Steel Cord significantly changes the manufacturing or treatment process or the chemicals used in the manufacturing or treatment process, American Steel Cord may handle the WWTP filter press sludge generated from the new process under this exclusion only after the facility has demonstrated that the waste meets the levels set forth in paragraph 1 and that no new hazardous constituents listed in Appendix VIII of Part 261 have been introduced.
		3. Data Submittals: The data obtained through annual verification testing or compliance with paragraph 2 must be submitted to U.S. EPA Region 5, 77 W. Jackson Blvd., Chicago, IL 60604-3590, within 60 days of sampling. Records of operating conditions and analytical data must be compiled, summarized, and maintained on site for a minimum of five years and must be made available for inspection. All data must be accompanied by a signed copy of the certification statement in 260.22(I)(12).
		4. (a) If, anytime after disposal of the delisted waste, American Steel Cord possesses or is otherwise made aware of any environmental data (including but not limited to leachate data or groundwater monitoring data) or any other data relevant to the delisted waste indicating that any constituent identified in Condition (1) is at a level in the leachate higher than the delisting level established in Condition (1), or is at a level in the ground water or soil higher than the health based level, then American Steel Cord must report such data, in writing, to the Regional Administrator within 10 days of first possessing or being made aware of that data.

		(b) Based on the information described in paragraph (a) and any other information received from any source, the Regional Administrator will make a preliminary determination as to whether the reported information requires Agency action to protect human health or the environment. Further action may include suspending, or revoking the exclusion, or other appropriate response necessary to protect human health and the environment.
		(c) If the Regional Administrator determines that the reported information does require Agency action, the Regional Administrator will notify the facility in writing of the actions the Regional Administrator believes are necessary to protect human health and the environment. The notice shall include a statement of the proposed action and a statement providing the facility with an opportunity to present information as to why the proposed Agency action is not necessary or to suggest an alternative action. The facility shall have 10 days from the date of the Regional Administrator's notice to present such information.
		(d) Following the receipt of information from the facility described in paragraph (c) or (if no information is presented under paragraph (c) the initial receipt of information described in paragraph (a), the Regional Administrator will issue a final written determination describing the Agency actions that are necessary to protect human health or the environment. Any required action described in the Regional Administrator's determination shall become effective immediately, unless the Regional Administrator provides otherwise.
Ampex Recording Media Corporation	Opelika, Ala	Solvent recovery residues in the powder or pellet form (EPA Hazardous Waste Nos. F003 and F005) generated from the recovery of spent solvents from the manufacture of tape recording media (generated at a maximum annual rate of 1,000 cubic yards in the powder or pellet form) after August 9, 1993. In order to confirm that the characteristics of the wastes do not change significantly, the facility must, on an annual basis, analyze a representative composite sample of the waste (in its final form) for the constituents listed in 40 CFR 261.24 using the method specified therein. The annual analytical results, including quality control information, must be compiled, certified according to 40 CFR 260.22(i)(12), maintained on-site for a minimum of five years, and made available for inspection upon request by any employee or representative of EPA or the State of Alabama. Failure to maintain the required records on-site will be considered by EPA, at its discretion, sufficient basis to revoke the exclusion to the extent directed by EPA.
Aptus, Inc.	Coffeyville, Kansas.	Klin residue and spray dryer/baghouse residue (EPA Hazardous Waste No. F027) generated during the treatment of cancelled pesticides containing

Appendix IX Wastes Excluded under 260.20 & 260.22

	2,4,5<->T and Silvex and related materials by Aptus' incinerator at Coffeyville, Kansas after December 27, 1991, so long as:
	(1) The incinerator is monitored continuously and is in compliance with operating permit conditions. Should the incinerator fail to comply with the permit conditions relevant to the mechanical operation of the incinerator, Aptus must test the residues generated during the run when the failure occurred according to the requirements of Conditions (2) through (4), regardless of whether or not the demonstration in Condition (5) has been made.
	(2) A minimum of four grab samples must be taken from each hopper (or other container) or kiln residue generated during each 24 hour run; all grabs collected during a given 24 hour run must then be composited to form one composite sample. A minimum of four grab samples must also be taken from each hopper (or other container) of spray dryer/baghouse residue generated during each 24 hour run; all grabs collected during a given 24 hour run must then be composited to form one composition sample. Prior to the disposal of the residues from each 24 hour run, a TCLP leachate test must be performed on these composite samples and the leachate analyzed for the TC toxic metals, nickel, and cyanide. If arsenic, chromium, lead or silver TC leachate test results exceed 1.6 ppm, barium levels exceed 32 ppm, cadmium or selenium levels exceed 0.3 ppm, mercury levels exceed 0.07 ppm, nickel levels exceed 10 ppm, or cyanide levels exceed 6.5 ppm, the wastes must be retreated to achieve these levels or must be disposed in accordance with Subtitle C or RCRA. Analyses must be performed according to SW-846 methodologies.
	(3) Aptus must generate, prior to the disposal of the residues, verification data from each 24 hour run for each treatment residue (i.e., kiln residue, spray dryer/baghouse residue) to demonstrate that the maximum allowable treatment residue concentrations listed below are not exceeded. Samples must be collected as specified in Condition (2). Analyses must be performed according to SW-846 methodologies. Any residues which exceed any of the levels listed below must be retreated or must be disposed of as hazardous.
	Kiln residue and spray dryer/baghouse residue must not exceed the following levels:
	Aldrin.....0.015 ppm
	Benzene.....9.7 ppm
	Benzo(a)pyrene.....0.43 ppm
	Benzo(b)fluoranthene.....1.8 ppm
	Chlordane.....0.37 ppm
	Chloroform.....5.4 ppm
	Chrysene.....170 ppm
	Dibenz(a,h)anthracene....0.083 ppm
	1,2-Dichloroethane.....4.1 ppm
	Dichloromethane.....2.4 ppm
	2,4-Dichlorophenol.....480 ppm
	Dichlorvos.....260 ppm
	Disulfaton.....23 ppm
	Endosulfan I.....310 ppm

	Fluorene.....120 ppm
	Indeno (1,2,3, cd) pyrene....330 ppm
	Methyl parathion.....210 ppm
	Nitrosodiphenylamine.....130 ppm
	Phenanthrene.....150 ppm
	Polychlorinated biphenyls....0.31 ppm
	Tetrachloroethylene.....59 ppm
	2,4,5-TP (silvex).....110 ppm
	2,4,6-Trichlorophenol.....3.9 ppm
	(4) Aptus must generate, prior to disposal of residues, verification data from each 24 hour run for each treatment residue (i.e., kiln residue, spray dryer/baghouse residue) to demonstrate that the residues do not contain tetra-, penta-, or hexachlorodibenzo-p-dioxins or furans at levels of regulatory concern. Samples must be collected as specified in Condition (2). The TCDD equivalent levels for the solid residues must be less than 5 ppt. Any residues with detected dioxins or furans in excess of this level must be retreated or must be disposed of as acutely hazardous.
	SW-846 Method 8290, a high resolution gas chromatography and high resolution mass spectroscopy (HRGC/HRMS) analytical method must be used. For tetra-, and penta-chlorinated dioxin and furan homologs, the maximum practical quantitation limit must not exceed 15 ppt for the solid residues. For hexachlorinated dioxin and furan homologs, the maximum practical quantitation limit must not exceed 37 ppt for the solid residues.
	(5) The test data from Conditions (1), (2), and (3), and (4) must be kept on file by Aptus for inspection purposes and must be compiled, summarized, and submitted to the Director for the Characterization and Assessment Division, Office of Solid Waste, by certified mail on a monthly basis and when the treatment of the cancelled pesticides and related materials is concluded. The testing requirements for Conditions (2), (3), and (4) will continue until Aptus provides the Director with the results of four consecutive batch analyses for the petitioned wastes, none of which exceed the maximum allowable levels listed in these conditions and the director notifies Aptus that the conditions have been lifted. All data submitted will be placed in the RCRA public docket.
	(6) Aptus must provide a signed copy of the following certification statement when submitting data in response to the conditions listed above: Under civil and criminal penalty of law for the making or submission of false or fraudulent statements or representations, I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the (those) identified section(s) of this document for which I cannot personally verify its (their) truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true,

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		accurate, and complete.
Arco Building Products	Sugarcreek, Ohio	Dewatered wastewater treatment sludge (EPA Hazardous Waste No. F019) generated from the chemical conversion coating of aluminum after August 15, 1986.
Arco Chemical Co	Miami, FL	Dewatered wastewater treatment sludge (EPA Hazardous Waste No. F019) generated from the chemical conversion coating of aluminum after April 29, 1986.
Arkansas Dept of Pollution Control and Ecology	Vertac Superfund site, Jacksonville Arkansas	Kiln ash, cyclone ash, and calcium chloride salts from incineration of residues (EPA Hazardous Waste No. F020 and F023) generated from the primary production of 2,4,5-T and 2,4-D after August 24, 1990. This one-time exclusion applies only to the incineration of the waste materials described in the petition, and it is conditional upon the data obtained from ADPC & E's full-scale incineration facility. To ensure that hazardous constituents are not present in the waste at levels of regulatory concern once the full-scale treatment facility is in operation, ADPC & E must implement a testing program for the petitioned waste. This testing program must meet the following conditions for the exclusion to be valid:
		(1) Testing: Sample collection and analyses (including quality control (QC) procedures) must be performed according to SW-846 methodologies.
		(A) Initial testing: Representative grab samples must be taken from each drum and kiln ash and cyclone ash generated from each 24 hours of operation, and the grab samples composited to form one composite sample of ash for each 24-hour period. Representative grab samples must also be taken from each drum of calcium chloride salts generated from each 24 hours of operation and composited to form one composite sample of calcium chloride salts for each 24-hour period. The initial testing requirements must be fulfilled for the following wastes:
		(i) Incineration by-products generated prior to and during the incinerator's trial burn; (ii) incineration by-products from the treatment of 2,4-D wastes for one week (or 7 days if incineration is not on consecutive days) after completion of the trial burn; (iii) incineration by-products from the treatment of blended 2,4-D and 2,4, 5-T wastes for two weeks (or 14 days if incineration is not on consecutive days) after completion of the trial burn; and (iv) incineration by-products from the treatment of blended 2,4-D and 2,4,5-T wastes for one week (or 7 days if incineration is not on consecutive days) when the percentage of 2, 4, 5-T wastes exceeds the maximum percentage treated under Condition (1)(A)(iii).
		Prior to disposal of the residues from each 24-hour sampling period, the daily composite must be analyzed for all the constituents listed in Condition (3). ADPC & E must report the analytical test data, including quality control information, obtained during this initial period no later than 90 days after the start of the operation.

		(B) Subsequent testing: Representative grab samples of each drum of kiln and cyclone ash generated from each week of operation must be composited to form one composite sample of ash for each weekly period. Representative grab samples of each drum of calcium chloride salts generated from each week of operation must also be composited to form one composite sample of calcium chloride salts for each weekly period.
		Prior to disposal of the residues from each weekly sampling period, the weekly composites must be analyzed for all of the constituents listed in Condition (3). The analytical data, including quality control information, must be compiled and maintained on site for a minimum of three years. These data must be furnished upon request and made available for inspection by any employee or representative of EPA.
		(2) Waste holding: The incineration residues that are generated must be stored as hazardous until the initial verification analyses or subsequent analyses are completed.
		If the composite incineration residue samples (from either Condition (1)(A) or Condition (1)(B)) do not exceed any of the delisting levels set in Condition (3), the incineration residues corresponding to these samples may be managed and disposed of in accordance with all applicable solid waste regulations.
		If any composite incineration residue sample exceeds any of the delisting levels set in Condition (3), the incineration residues generated during the time period corresponding to this sample must be retreated until they meet these levels (analyses must be repeated) or managed and disposed of in accordance with subtitle C of RCRA.
		Incineration residues which are generated but for which analysis is not complete or valid must be managed and disposed of in accordance with subtitle C of RCRA, until valid analyses demonstrate that the wastes meet the delisting levels.
		(3) Delisting levels: If concentrations in one or more of the incineration residues for any of the hazardous constituents listed below exceed their respective maximum allowable concentrations also listed below, the batch of failing waste must either be re-treated until it meets these levels or managed and disposed of in accordance with subtitle C of RCRA.
		(A) Inorganics (Leachable): Arsenic, 0.32 ppm; Barium, 6.3 ppm; Cadmium 0.06 ppm; Chromium, 0.32 ppm; Cyanide, 4.4 ppm; Lead, 0.32 ppm; Mercury, 0.01 ppm; Nickel, 4.4 ppm; Selenium, 0.06 ppm; Silver, 0.32 ppm. Metal concentrations must be measured in the waste leachate as per 40 CFR 261.24. Cyanide extractions must be conducted using distilled water.
		(B) Organics: Benzene, 0.87 ppm; Benzo(a)anthracene, 0.10 ppm; Benzo(a)pyrene, 0.04 ppm; Benzo (b) fluoranthene, 0.16 ppm;

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	Chlorobenzene, 152 ppm; o-Chlorophenol, 44 ppm; Chrysene, 15 ppm, 2, 4-D, 107 ppm; DDE, 1.0 ppm; Dibenzo(a,h)anthracene, 0.007 ppm; 1, 4 -Dichlorobenzene, 265 ppm; 1, 1-Dichloroethylene, 1.3 ppm; trans-1,2-Dichloroethylene, 37 ppm; Dichloromethane, 0.23 ppm; 2,4-Dichlorophenol, 43 ppm; Hexachlorobenzene, 0.26 ppm; Indeno (1,2,3-cd) pyrene, 30 ppm; Polychlorinated biphenyls, 12 ppm; 2,4,5-T, 1 X 106 ppm; 1,2,4,5-Tetrachlorobenzene, 56 ppm; Tetrachloroethylene, 3.4 ppm; Trichloroethylene, 1.1 ppm; 2,4,5-Trichlorophenol, 21,000 ppm; 2,4,6-Trichlorophenol, 0.35 ppm. (C) Chlorinated dioxins and furans: 2,3,7,8-Tetrachlorodibenzo-p-dioxin equivalents, 4 X 10-7 ppm. The petitioned by-product must be analyzed for the tetra-, penta-, hexa-, and heptachlorodibenzo-p-dioxins, and the tetra-, penta-, hexa-, and heptachlorodibenzofurans to determine the 2, 3, 7, 8-tetrachlorodibenzo-p-dioxin equivalent concentration. The analysis must be conducted using Method 8290, a high resolution gas chromatography/high resolution mass spectrometry method, and must achieve practical quantitation limits of 15 parts per trillion (ppt) for the tetra- and penta-homologs, and 37 ppt for the hexa- and hepta- homologs. (4) Termination of testing: Due to the possible variability of the incinerator feeds, the testing requirements of Condition (1)(B) will continue indefinitely. (5) Data submittals: Within one week of system start-up, ADPC & E must notify the Section Chief, Variances Section (see address below) when the full-scale incineration system is on-line and waste treatment has begun. The data obtained through Condition (1)(A) must be submitted to the Section Chief, Variances Section, PSPD/OSW (OS-343), U.S. EPA, 401 M Street SW., Washington, DC 20460, within the time period specified. At the Section Chief's request, ADPC & E must submit analytical data obtained through Condition (1)(B) within the time period specified by the Section Chief. Failure to submit the required data obtained from Condition (1)(A) within the specified time period or to maintain the required records for the time specified in Condition (1)(B) (or to submit data within the time specified by the Section Chief) will be considered by the Agency, at its discretion, sufficient basis to revoke ADPC & E's exclusion to the extent directed by EPA. All data must be accompanied by the following certification statement: Under civil and criminal penalty of law for the making or submission of false or fraudulent statements or representations (pursuant to the applicable provisions of the Federal Code, which include, but may not be limited to, 18 U.S.C. 1001 and 42 U.S.C. 6928), I certify that the information contained in or
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		accompanying this document is true, accurate and complete. As to the (those) identified section(s) of this document for which I cannot personally verify its (their) truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate and complete. In the event that any of this information is determined by EPA in its sole discretion to be false, inaccurate or incomplete, and upon conveyance of this fact to the company, I recognize and agree that this exclusion of wastes will be void as if it never had effect or to the extent directed by EPA and that the company will be liable for any actions taken in contravention of the company's RCRA and CERCLA obligations premised upon the company's reliance on the void exclusion.
BBC Brown Boveri, Inc	Sanford, FL	Dewatered Wastewater treatment sludge (EPA Hazardous Waste No. F006) generated from electroplating operations after October 17, 1986.
Bethlehem Steel Corporation	Lackawanna, New York.	Ammonia still lime sludge (EPA Hazardous Waste No. K060) and other solid waste generated from primary metal-making and coking operations. This is a one-time exclusion for 118,000 cubic yards of waste contained in the on-site landfill referred to as HWM-2. This exclusion was published on April 24, 1996.
Bethlehem Steel Corporation.	Sparrows Point, Maryland.	Stabilized filter cake (at a maximum annual rate of 1100 cubic yards) from the treatment of wastewater treatment sludges (EPA Hazardous Waste No. F006) generated from electroplating operations after [insert date of publication in Federal Register]. Bethlehem Steel (BSC) must implement a testing program that meets the following conditions for the exclusion to be valid: (1)Testing: Sample collection and analyses (including quality control (QC) procedures) must be performed according to SW-846 methodologies. If EPA judges the stabilization process to be effective under the conditions used during the initial verification testing, BSC may replace the testing required in Condition (1)(A) with the testing required in Condition (1)(B). BSC must continue to test as specified in Condition (1)(A) until and unless notified by EPA in writing that testing in Condition (1)(A) may be replaced by Condition (1)(B) (to the extent directed by EPA) (A)Initial Verification Testing: During at least the first eight weeks of operation of the full-scale treatment system, BSC must collect and analyze weekly composites representative of the stabilized waste. Weekly composites must be composed of representative grab samples collected from every batch during each week of stabilization. The composite samples must be collected and analyzed, prior to the disposal of the stabilized filter cake, for all constituents listed in Condition (3). BSC must report the analytical

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	test data, including a record of the
	ratios of lime kiln dust and fly ash
	used and quality control
	information, obtained during this
	initial period no later than 60 days
	after the collection of the last
	composite of stabilized filter cake.
	(B)Subsequent Verification
	Testing: Following written
	notification by EPA, BSC may
	substitute the testing condition in
	(1)(B) for (1)(A). BSC must collect
	and analyze at least one composite
	representative of the stabilized
	filter cake generated each month.
	Monthly composites must be comprised
	of representative samples collected
	from all batches that are sta-
	bilized in a one-month period. The
	monthly samples must be analyzed
	prior to the disposal of the
	stabilized filter cake for chromium,
	lead and nickel. BSC may, at its
	discretion, analyze composite
	samples more frequently to
	demonstrate that smaller batches of
	waste are non-hazardous.
	(C)Annual Verification
	Testing: In order to confirm
	that the characteristics of the
	treated waste do not change
	significantly, BSC must, on an
	annual basis, analyze a
	representative composite sample of
	stabilized filter cake for all TC
	constituents listed in 40 CFR
	261.24 using the method specified
	therein. This composite sample must
	represent the stabilized filter cake
	generated over one week.
	(2)Waste Holding and
	Handling: BSC must store, as
	hazardous, all stabilized filter
	cake generated until verification
	testing (as specified in Conditions
	(1)(A) and (1)(B)) is completed and
	valid analyses demonstrate that the
	delisting levels set forth in
	Condition (3) are met. If the levels
	of hazardous constituents measured
	in the samples of stabilized filter
	cake generated are below all the
	levels set forth in Condition (3),
	then the stabilized filter cake is
	non-hazardous and may be managed and
	disposed of in accordance with all
	applicable solid waste regulations.
	If hazardous constituent levels in
	any weekly or monthly composite
	sample equal or exceed any of the
	delisting levels set in Condition
	(3), the stabilized filter cake
	generated during the time period
	corresponding to this sample must be
	retreated until it is below these
	levels or managed and disposed of in
	accordance with Subtitle C of RCRA.
	(3)Delisting Levels: All
	concentrations must be measured in
	the waste leachate by the method
	specified in 40 CFR 261.24. The
	leachable concentrations for the
	constituents must be below the
	following levels (ppm):
	arsenic-4.8; barium-100;
	cadmium-0.48; chromium-5.0;
	lead-1.4; mercury-0.19;
	nickel-9.6; selenium-1.0;
	silver-5.0.
	(4)Changes in Operating
	Conditions: After completing
	the initial verification test period
	in Condition (1)(A), if BSC decides
	to significantly change the stabi-

		lization process (e.g.,
		stabilization reagents) developed
		under Condition (1), then BSC must
		notify EPA in writing prior to
		instituting the change. After
		written approval by EPA, BSC may
		manage waste generated from the
		changed process as non-hazardous
		under this exclusion, provided the
		other conditions of this exclusion
		are fulfilled.
		(5)Data Submittals: Two
		weeks prior to system start-up, BSC
		must notify in writing the Section
		Chief, Delisting Section (see
		address below) when stabilization of
		the dewatered filter cake will
		begin. The data obtained through
		Condition (1)(A) must be submitted
		to the Section Chief, Delisting
		Section, OSW (5304), U.S. EPA, 401 M
		Street, SW, Washington, DC 20460
		within the time period specified.
		The analytical data, including
		quality control information and
		records of ratios of lime kiln dust
		and fly ash used, must be compiled
		and maintained on site for a minimum
		of five years. These data must be
		furnished upon request and made
		available for inspection by EPA or
		the State of Maryland. Failure to
		submit the required data within the
		specified time period or maintain
		the required records on site for the
		specified time will be considered by
		the Agency, at its discretion,
		sufficient basis to revoke the
		exclusion to the extent directed by
		EPA. All data must be accompanied by
		a signed copy of the following
		certification statement to attest to
		the truth and accuracy of the data
		submitted:B1747
		Under civil and criminal penalty of
		law for the making or submission of
		false or fraudulent statements or
		representations (pursuant to the
		applicable provisions of the Federal
		Code, which include, but may not be
		limited to, 18 U.S.C 1001 and 42
		U.S.C 6928), I certify that the
		information contained in or
		accompanying this document is true,
		accurate and complete.
		As to the (those) identified
		section(s) of this document for
		which I cannot personally verify its
		(their) truth and accuracy, I
		certify as the company official
		having supervisory responsibility
		for the persons who, acting under my
		direct instructions, made the
		verification that this information
		is true, accurate and complete.
		In the event that any of this
		information is determined by EPA in
		its sole discretion to be false,
		inaccurate or incomplete, and upon
		conveyance of this fact to the
		company, I recognize and agree that
		this exclusion of waste will be void
		as if it never had effect or to the
		extent directed by EPA and that the
		company will be liable for any
		actions taken in contravention of
		the company's RCRA and CERCLA
		obligations premised upon the
		company's reliance on the void
		exclusion.
Boeing	Auburn,	Residually contaminated soils in an
Commercial	Washington.	inactive sludge pile containment
Airplane		area on March 27, 1990, previously
Co		used to store wastewater treatment

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		sludges generated from
		electroplating operations (EPA
		Hazardous Waste No. F006).
Bommer	Landrum,	Wastewater treatment sludges (EPA
Industries	SC	Hazardous Waste No. F006) generated
Inc.		from their electroplating opera-
		tions and contained in evaporation
		ponds #1 and #2 on August 12, 1987.
BMW Mfg Corp	Greer, SC	WWTSludge per 66FR21877
		May 2,2001
BWX	Lynchburg,	Wastewater treatment sludge from
Technologies	TN	electroplating operations (EPA
	65FR2341	Hazardous Waste No. F006) generated
	Jan 14, 2000	at a maximum annual rate of 500 cubic
		yards per year, after January 14,
		2000, and disposed of in a Subtitle
		D landfill. BWX Technologies must
		meet the following conditions for
		the exclusion to be valid:
		(1) Delisting Levels: All leachable
		concentrations for the following
		constituents measure using the
		SW-846 method 1311 (the TCLP) must
		not exceed the following levels
		(mg/l). (a) Inorganic
		constituents-Antimony-0.6;
		Arsenic-5.0; Barium-100;
		Beryllium-0.4; Cadmium-0.5;
		Chromium-5.0; Cobalt-210;
		Copper-130; Lead-1.5; Mercury-0.2;
		Nickel-70; Silver-5.0; Thallium-0.2;
		Tin-2100; Zinc-1000; Fluoride-400.
		(b) Organic constituents-Acetone-
		Methylene Chloride-0.5.
		(2) Verification testing schedule: BWX
		Technologies must analyze a
		representative sample of the filter
		cake from the pickle acid treatment
		system on an annual, calendar year
		basis using methods with appropriate
		detection levels and quality control
		procedures. If the level of any
		constituent measured in the sample
		of filter cake exceeds the levels
		set forth in Paragraph 1, then the
		waste is hazardous and must be
		managed in accordance with Subtitle
		C of RCRA. Data from the annual
		verification testing must be
		submitted to EPA within 60 days of
		the sampling event.
		(3) Changes in Operating Conditions:
		If BWX Technologies significantly
		changes the manufacturing or treat-
		ment process described in the
		petition, or the chemicals used in
		the manufacturing or treatment
		process, BWX Technologies may not
		manage the filter cake generated
		from the new process under this
		exclusion until it has met the
		following conditions: (a) BWX Tech-
		nologies must demonstrate that the
		waste meets the delisting levels set
		forth in Paragraph 1; (b) it must
		demonstrate that no new hazardous
		constituents listed in appendix VIII
		of part 261 have been introduced
		into the manufacturing or treatment
		process; and (c) it must obtain
		prior written approval from EPA to
		manage the waste under this
		exclusion.
		(4) Data Submittals: The data obtained
		under Paragraphs 2 and 3 must be
		submitted to The Waste and Chemicals
		Management Division, U.S. EPA Re-
		gion III, 1650 Arch Street,
		Philadelphia, PA 19103. Records of
		operating conditions and analytical
		data must be compiled, summarized,
		and maintained on site for a minimum
		of five years and must be furnished
		upon request by EPA or the

		Commonwealth of Virginia, and made
		available for inspection. Failure to
		submit the required data within the
		specified time period or to maintain
		the required records on site for the
		specified time period will be
		considered by EPA, at its discre-
		tion, sufficient basis to revoke the
		exclusion to the extent determined
		necessary by EPA. All data must be
		accompanied by a signed copy of the
		certification statement set forth in
		40 CFR 260.22(i)(12) to attest to
		the truth and accuracy of the data
		submitted.
		(5) Reopener:
		(a) If BWX Technologies discovers that
		a condition at the facility or an
		assumption related to the disposal
		of the excluded waste that was
		modeled or predicted in the petition
		does not occur as modeled or
		predicted, then BWX Technologies
		must report any information rele-
		vant to that condition, in writing,
		to the Regional Administrator or his
		delegate within 10 days of discover-
		ing that condition.
		(b) Upon receiving information
		described in paragraph (a) of this
		section, regardless of its source,
		the Regional Administrator or his
		delegate will determine whether the
		reported condition requires further
		action. Further action may include
		repealing the exclusion, modifying
		the exclusion, or other appropriate
		response necessary to protect human
		health and the environment.
		(6) Notification Requirements: BWX
		Technologies must provide a one-time
		written notification to any State
		Regulatory Agency to which or
		through which the delisted waste
		described above will be transported
		for disposal at least 60 days prior
		to the commencement of such
		activities. Failure to provide such
		a notification will be deemed to be
		a violation of this exclusion and
		may result in a revocation of the
		decision.
Capitol Products	Harrisburg, PA	Dewatered wastewater treatment
Corp.		sludges (EPA Hazardous Waste No.
		FO19) generated from the chemical
		conversion coating of aluminum after
		September 12, 1986.
Capitol	Kentland, IN	Dewatered wastewater treatment sludges
Products		(EPA Hazardous Waste No. F019)
Corporation		generated from the chemical
		conversion coating of aluminum after
		November 17, 1986.
Care Free	Charlotte,	Wastewater treatment sludge (EPA
Aluminum	Michigan	Hazardous Waste No. F019) generated
Products,		from the chemical conversion coating
Inc.		of aluminum (generated at a maximum
		annual rate of 100 cubic yards),
		after August 21, 1992. In order to
		confirm that the characteristics of
		the waste do not change
		significantly, the facility must, on
		an annual basis, analyze a
		representative composite sample for
		the constituents listed in 261.24
		using the method specified therein.
		The annual analytical results,
		including quality control
		information, must be compiled,
		certified according to
		260.22(i)(12), maintained on-site
		for a minimum of five years, and
		made available for inspection upon
		request by any employee or
		representative of EPA or the State

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		of Michigan. Failure to maintain the required records on-site will be considered by EPA, at its discretion, sufficient basis to revoke the exclusion to the extent directed by EPA.
Chamberlian-Featherlite, Inc.	Hot Springs, AR.	Dewatered wastewater treatment sludge (EPA Hazardous Waste No. F019) generated from the chemical conversion coating of aluminum after July 16, 1986.
Cincinnati Metropolitan Sewer District.	Cincinnati, OH	Sluiced bottom ash (approximately 25,000 cubic yards) contained in the South Lagoon, on September 13, 1985 which contains EPA Hazardous Waste Nos. F001, F002, F003, F004, and F005
Clay Equipment Corporation.	Cedar Falls, Iowa	Dewatered wastewater treatment sludge (EPA Hazardous Waste No. F006) and spent cyanide bath solutions (EPA Hazardous Waste No. F009) generated from electroplating operations and disposed of in an on-site surface impoundment. This is a onetime exclusion. This exclusion was published on August 1, 1989.
Continental Can Co.	Olympia, WA	Dewatered wastewater treatment sludge (DPA Hazardous Waste No. FO19) generated from the chemical conversion coating of aluminum after September 12, 1986.
Dover Corp, Norris Div.	Tulsa, OK	Dewatered wastewater treatment sludge (EPA Hazardous Waste No. F006) generated from their electroplating operations after April 29, 1986.
DuraTherm, Inc.	San Leon TX	Desorber solids per 65FR21655 April 24, 2000
Eli Lilly and Company.	Clinton, Indiana	Incinerator scrubber liquids, entering and contained in their onsite surface impoundment, and solids settling from these liquids originating from the burning of spent solvents (EPA Hazardous Waste Nos. F002, F003, and F005) contained in their onsite surface impoundment and solids retention area on August 18, 1988 and any new incinerator scrubber liquids and settled solids generated in the surface impoundment and disposed of in the retention are after August 12, 1988
Envirite of Illinois (formerly Envirite Corporation)	Harvey, Illinois	See waste description under Envirite of Pennsylvania.
Envirite of Ohio (formerly Envirite Corporation)	Canton, Ohio	See waste description under Envirite of Pennsylvania .
Envirite of Pennsylvania (formerly Envirite Corporation)	York, Pennsylvania	Dewatered wastewater sludges (EPA Hazardous Waste No.F006) generated from electroplating operations; spent cyanide plating solutions (EPA Hazardous Waste No. F007) generated from electroplating operations; plating bath residues from the bottom of plating baths (EPA Hazardous Waste No. F008) generated from electroplating operations where cyanides are used in the process; spent stripping and cleaning bath solutions (EPA Hazardous Waste No. F009) generated from electroplating operations where cyanides are used in the process; spent cyanide solutions from salt bath pot cleaning (EPA Hazardous Waste No. F011) generated from metal heat treating operations; quenching wastewater treatment sludges (EPA Hazardous Waste No. F012) generated from metal heat treating where cyanides are used in the process;

		wastewater treatment sludges (EPA Hazardous Waste No. F019) generated from the chemical conversion coating of aluminum after November 14, 1986.
		To ensure that hazardous constituents are not present in the waste at levels of regulatory concern, the facility must implement a contingency testing program for the petitioned waste. This testing program must meet the following conditions for the exclusions to be valid:
		(1) Each batch of treatment residue must be representatively sampled and tested using the EP Toxicity test for arsenic, barium, cadmium, chromium, lead, selenium, silver, mercury, and nickel. If the extract concentrations for chromium, lead, arsenic, and silver exceed 0.315 ppm; barium levels exceed 6.3 ppm; cadmium and selenium exceed 0.063 ppm; mercury exceeds 0.0126 ppm; or nickel levels exceed 2.205 ppm; the waste must be re-treated or managed and disposed as a hazardous waste under 40 CFR Parts 262 to 265 and the permitting standards of 40 CFR 270
		(2) Each batch of treatment residue must be tested for reactive and leachable cyanide. If the reactive cyanide levels exceed 250 ppm or leachable cyanide levels (using the EP Toxicity test without acetic acid adjustment) exceed 1.26 ppm, the waste must be re-treated or managed and disposed as a hazardous waste under 40 CFR Parts 262 to 265 and the permitting standards of 40 CFR Part 270.
		(3) Each batch of waste must be tested for the total content of specific organic toxicants. If the total content of anthracene exceeds 76.8 ppm, 1,2-diphenyl hydrazine exceeds 0.001 ppm, methylene chloride exceeds 8.18 ppm, methyl ethyl ketone exceeds 326 ppm, n-nitrosodiphenylamine exceeds 11.9 ppm, phenol exceeds 1,566 ppm, tetrachloroethylene exceeds 0.188 ppm, or trichloroethylene exceeds 0.592 ppm, the waste must be managed and disposed as a hazardous waste under 40 CFR Parts 262 to 265 and the permitting standards of 40 CFR Part 270.
		(4) A grab sample must be collected from each batch to form one monthly composite sample which must be tested using GC/MS analysis for the compounds listed in#3, above, as well as the remaining organics on the priority pollutant list. (See 47 FR 52309, November 19, 1982, for a list of the priority pollutants.)
		(5) The data from conditions 1-4 must be kept on file at the facility for inspection purposes and must be compiled, summarized, and submitted to the Administrator by certified mail semi-annually. The Agency will review this information and if needed will propose to modify or withdraw the exclusion. The organics testing described in conditions 3 and 4, above, are not required until six months from the date of promulgation. The Agency's decision to conditionally exclude the treatment residue generated from the wastewater treatment systems at these facilities applies only to the

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		wastewater and solids treatment
		systems as they presently exist as
		described in the delisting petition.
		The exclusion does not apply to the
		proposed process additions described
		in the petition as recovery includ-
		ing crystallization, electrolytic
		metals recovery, evaporative
		recovery, and ion exchange.
EPA's Mobile	Denney Farm	Process wastewater, rotary kiln ash,
Incineration	Site; McDowell,	CHEAF media, and other solids
System.	MO.	(except spent activated carbon) (EPA
		Hazardous Waste Nos. F020, F022,
		F023, F026, F027, and F028)
		generated during the field
		demonstration of EPA's Mobile
		Incinerator at the Denney Farm Site
		in McDowell, Missouri, after July
		25, 1985, so long as: (1) The
		incinerator is functioning properly;
		(2) a grab sample is taken from each
		tank of wastewater generated and the
		EP leachate values do not exceed
		0.03 ppm for mercury, 0.14 ppm for
		selenium, and 0.68 ppm for chromium;
		and (3) a grab sample is taken from
		each drum of soil or ash generated
		and a core sample is collected from
		each CHEAF roll generated and the EP
		leachate values of daily composites
		do not exceed 0.044 ppm in ash or
		CHEAF media for mercury or 0.22 ppm
		in ash or CHEAF media for selenium.
EPA's Mobile	McDowell,	Kiln ash, cyclone ash, separator
Incineration	MO	sludge, and filtered wastewater
System		(except spent activated carbon) (EPA
(MIS).		Hazardous Waste No. F027) generated
		during the treatment of cancelled
		pesticides containing 2,4,5-T and
		Silvex and related materials by the
		EPA's Mobile Incineration System at
		the Denney Farm Site in McDowell,
		Missouri after March 11, 1988, so
		long as:
		(1) the incinerator is monitored
		continuously and is in compliance
		with operating permit conditions.
		Should the incinerator fail to
		comply with the permit conditions
		relevant to the mechanical operation
		of the incinerator, RCB must test
		the residues generated during the
		run when the failure occurred
		according to the requirements of
		Conditions (2) through (5),
		regardless of whether or not the
		demonstration in Condition (6) has
		been made;
		(2) Four grab samples of wastewater
		must be composited from the volume
		of filtered wastewater collected
		after each eight hour run and, prior
		to disposal, the composite samples
		analyzed for the EP toxic metals,
		nickel, and cyanide. If arsenic,
		chromium, lead, and silver EP
		leachate test results exceed 0.44
		ppm; barium levels exceed 8.8 ppm;
		cadmium and selenium levels exceed
		0.09 ppm; mercury levels exceed 0.02
		ppm; nickel levels exceed 4.4 ppm;
		or cyanide levels exceed 1.8 ppm,
		the wastewater must be retreated to
		achieve these levels or must be
		disposed in accordance with Subtitle
		C of RCRA. Analyses must be per-
		formed according to SW-846
		methodologies.
		(3) One grab sample must be taken from
		each drum of kiln ash generated
		during each eight hour run; all
		grabs collected during a given eight
		hour run must then be composited to
		form one composite sample. One grab

		sample must be taken from each drum
		of cyclone ash generated during each
		eight hour run; all grabs collected
		during a given eight hour run must
		then be composited to form one
		composite sample. A composite sample
		of four grab samples of the separa-
		tor sludge must be collected at the
		end of each eight hour run. Prior to
		the disposal of the residues from
		each eight hour run, an EP leachate
		test must be performed on these
		composite samples and the leachate
		analyzed for the EP toxic metals,
		nickel, and cyanide. If arsenic,
		chromium, lead, and silver EP
		leachate test results exceed 1.6
		ppm; barium levels exceed 32 ppm;
		cadmium and selenium levels exceed
		0.3 ppm; mercury levels exceed 0.07
		ppm; nickel levels exceed 16 ppm; or
		cyanide levels exceed 6.5 ppm, the
		wastes must be retreated to achieve
		these levels or must be disposed in
		accordance with Subtitle C of RCRA.
		Analyses must be performed according
		to SW-846 methodologies.
		(4) RCB must generate, prior to
		disposal of residues, verification
		data from each eight hour run for
		each treatment residue
		(i.e., kiln ash, cyclone
		ash, separator sludge, and filtered
		wastewater) to demonstrate that the
		maximum allowable treatment residue
		concentrations listed below are not
		exceeded. Samples must be collected
		as specified in conditions (2) and
		(3). Analyses must be performed
		according to SW-846 methodologies.
		Any residues which exceed any of the
		levels listed below must be
		retreated or must be disposed as
		hazardous.
		Solid and sludge concentrations must
		not exceed the following levels:
		Aldrin-0.015 ppm
		Benzene-9.7 ppm
		Benzo(a)pyrene-0.43 ppm
		Benzo(b)fluoranthene-1.8 ppm
		Chlordane-0.37 ppm
		Chloroform-5.4 ppm
		Chrysene-170 ppm
		Dibenz(a,h)anthracene-0.083 ppm
		1,2-Dichloroethane-4.1 ppm
		Dichloromethane-2.4 ppm
		2,4-Dichlorophenol-480 ppm
		Dichlorvos-260 ppm
		Disulfaton-23 ppm
		Endosulfan I-310 ppm
		Fluorene-120 ppm
		Indeno(1,2,3-cd)pyrene-330 ppm
		Methyl parathion-210 ppm
		Nitrosodiphenylamine-130 ppm
		Phenanthrene-150 ppm
		Polychlorinated
		biphenyls-0.31 ppm
		Tetrachloroethylene-59 ppm
		2,4,5-TP (silvex)-110 ppm
		2,4,6-Trichlorophenol-3.9 ppm
		And detected wastewater concentrations
		do not exceed the following levels:
		Acetone-35 ppm
		Aldrin-0.000018 ppm
		Benzene-0.044 ppm
		Benzo(a)pyrene-0.000027 ppm
		Benzo(b)fluoranthene-0.00018 ppm
		Biphenyl-15 ppm
		Bis-2-ethylhexyl
		phthalate-6.2 ppm
		Chlordane-0.00024 ppm
		Chlorobenzene-8.8 ppm
		Chloroform-0.052 ppm
		Chrysene-0.0018 ppm

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	2,4-D-3.5 ppm
	Dibenz(a,h)anthracene-0.00006 ppm
	Dichloromethane-0.042 ppm
	1,3-Dichlorobenzene-34 ppm
	1,4-Dichlorobenzene-0.66 ppm
	1,2-Dichlorobenzene-26 ppm
	1,2-Dichloroethane-0.044 ppm
	2,4-Dichlorophenol-0.88 ppm
	Dichlorvos-0.78 ppm
	Diethyl phthalate-4,400 ppm
	Disulfaton-0.016 ppm
	Endosulfan I-0.020 ppm
	Ethyl benzene-35 ppm
	Fluoranthene-1.8 ppm
	Fluorene-0.018 ppm
	Indeno(1,2,3-cd)pyrene-0.0018 ppm
	Isophorone-62 ppm
	Methyl chloride-35 ppm
	Methyl parathion-0.099 ppm
	Naphthalene-80 ppm
	Nitrosodiphenylamine-0.063 ppm
	Pentachlorophenol-8.8 ppm
	Phenanthrene-0.018 ppm
	Phenol-8.8 ppm
	Polychlorinated biphenyls-0.00072 ppm
	Pyrene-35 ppm
	Tetrachloroethylene-0.059 ppm
	2,3,4,6-Tetrachlorophenol-8.8 ppm
	Toluene-88 ppm
	2,4,5-TP (silvex)-0.088 ppm
	1,2,4-Trichlorobenzene-6.2 ppm
	2,4,6-Trichlorophenol-0.018 ppm
	2,4,5-Trichlorophenol-35 ppm
	2,4,5-Trichlorophenoxyacetic acid-0.88 ppm
	Xylene-619 ppm;
	(5) RCB must generate, prior to disposal of residues, verification data from each eight hour run for each treatment residue (i.e., kiln ash, cyclone ash, separator sludge, and filtered wastewater) to demonstrate that the residues do not contain tetra-, penta-, or hexachlorodibenzo-p-dioxins or furans at levels of regulatory concern. Samples must be collected as specified in conditions (2) and (3). The TCDD equivalent levels for solids must be less than 5 ppt and for wastewater the levels must be below 0.002 ppt. Any residues with detected dioxins or furans in excess of these levels must be retreated or must be disposed as acutely hazardous. Method 8290, a high resolution gas chromatography and high resolution mass spectroscopy (HRGC/HRMS) analytical method, must be used. For tetra- and penta-chlorinated dioxin and furan homologs, the maximum practical quantitation limit must not exceed 15 ppt for solids and 120 ppq for wastewaters. For hexachlorinated dioxin and furan homologs, the maximum practical quantitation limit must not exceed 37 ppt for solids and 0.3 ppt for wastewaters;
	(6) The test data from conditions (1), (2), (3), (4) and (5) must be kept on file by RCB for inspection purposes and must be compiled, summarized, and submitted to the Assistant Administrator for Solid Waste and Emergency Response by certified mail on a monthly basis and when the treatment of the cancelled pesticides and related materials is concluded. The testing requirements for conditions (2), (3), (4), and (5) will continue until RCB provides the Assistant

		Administrator with the results of four consecutive batch analyses for the petitioned wastes, none of which exceed the maximum allowable treatment residue concentrations listed in these conditions and the Assistant Administrator notifies RCB that the conditions have been lifted. All data submitted will be placed in the RCRA docket.
		(7) RCB must provide a signed copy of the following certification statement when submitting data in response to the conditions listed above: Under civil and criminal penalty of law for the making or submission of false or fraudulent statements or representations, I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the (those) identified section(s) of this document for which I cannot personally verify its (their) accuracy, I certify as the Agency official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate and complete.
Falconer Glass Indust., Inc	Falconer, NY	Wastewater treatment sludges from the filter press and magnetic drum separator (EPA Hazardous Waste No. F006) generated from electroplating operations after July 16, 1986.
Florida Production Engineering Company	Daytona Beach, Florida	This is a one-time exclusion. Wastewater treatment sludges (EPA Hazardous Waste No. F006) generated from electroplating operations and contained in four on-site trenches on January 23, 1987.
General Electric Company	Shreveport Louisiana	Wastewater treatment sludges (EPA Hazardous Waste No. F006) generated from electroplating operations and contained in four on-site treatment ponds on August 12, 1987.
General Motors Corporation	Lake Orion Michigan	Wastewater treatment plant (WWTP) sludge from the chemical conversion coating (phosphate coating) of aluminum (EPA Hazardous Waste No. F019) generated at a maximum annual rate of 1,500 tons per year (or 1,500 cubic yards per year), after October 24, 1997 and disposed of in a Subtitle D landfill.
		1.Verification Testing: GM must implement an annual testing program to demonstrate, based on the analysis of a minimum of four representative samples, that the constituent concentrations measured in the TCLP (or OWEP, where appropriate) extract of the waste are within specific levels. The constituent concentrations must not exceed the following levels (mg/l) which are back-calculated from the delisting health-based levels and a DAF of 90: Arsenic-4.5; Cobalt-189; Copper- 126; Nickel-63; Vanadium-18; Zinc-900; 1,2-Dichloroethane-0.45; Ethylbenzene-63; 4-Methylphenol-16.2; Naphthalene-90; Phenol-1800; and Xylene-900. The constituent concentrations must also be less than the following levels (mg/l) which are the toxicity characteristic levels: Barium-100.0; and Chromium (total)-5.0.
		2.Changes in Operating

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		Conditions: If GM significantly changes the manufacturing or treatment process or the chemicals used in the manufacturing or treatment process, GM may handle the WWTP filter press sludge generated from the new process under this exclusion after the facility has demonstrated that the waste meets the levels set forth in paragraph 1 and that no new hazardous constituents listed in Appendix VIII of Part 261 have been introduced.
		3.Data Submittals: The data obtained through annual verification testing or paragraph 2 must be submitted to U.S. EPA Region 5, 77 W. Jackson Blvd., Chicago, IL 60604-3590, within 60 days of sampling. Records of operating conditions and analytical data must be compiled, summarized, and maintained on site for a minimum of five years and must be made available for inspection. All data must be accompanied by a signed copy of the certification statement in 260.22(l)(12).
General Motors Corp., Fisher Body Division	Elyria, OH	The residue generated from the use of the Chemfix (r) treatment process on sludge (EPA Hazardous Waste No. F006) generated from electroplating operations and contained in three on-site surface impoundments on November 14, 1986. To assure that stabilization occurs, the following conditions apply to this exclusion: (1) Mixing ratios shall be monitored continuously to assure consistent treatment. (2) One grab sample of the treated waste shall be taken each hour as it is pumped to the holding area (cell) from each trailer unit. At the end of each production day, the grab samples from the individual trailer units will be composited and the EP toxicity test will be run on each composite sample. If lead or total chromium concentrations exceed 0.315 ppm or if nickel exceeds 2.17 ppm, in the EP extract, the waste will be removed and retreated or disposed of as a hazardous waste. (3) The treated waste shall be pumped into bermed cells which are constructed to assure that the treated waste is identifiable and retrievable (i.e., the material can be removed and either disposed of as a hazardous waste or retreated if conditions 1 or 2 are not met). Failure to satisfy any of these conditions would render the exclusion void. This is a one-time exclusion, applicable only to the residue generated from the use of the Chemfix (r) treatment process on the sludge currently contained in the three on-site surface impoundments.
Geological Reclamation Operations and Systems Inc.	Morrisville, PA	Wastewater treatment sludge filter cake from the treatment of EPA Hazardous Waste No. F039, generated at a maximum annual rate of 1,000 cubic yards. This exclusion was published on August 20, 1991. This exclusion covers the filter cake resulting from the treatment of hazardous leachate derived from only old GROWS and non-hazardous leachate derived from only

		non-hazardous sources. This exclusion does not address the wastes disposed of in the old GROWS Landfill or the grit generated during the removal of heavy solids from the landfill leachate. To ensure that hazardous constituents are not present in the filter cake at levels of regulatory concern, GROWS must implement a testing program for the petitioned waste. This testing program must meet the conditions listed below in order for the exclusions to be valid: (1) Testing: Sample collection and analyses, including quality control (QC) procedures, must be performed according to SW-846 methodologies. (A) Sample Collection: Each batch of waste generated over a four-week period must be collected in containers with a maximum capacity of 20-cubic yards. At the end of the four-week period, each container must be divided into four quadrants and a single, full-depth core sample shall be collected from each quadrant. All of the full-depth core samples then must be composited under laboratory conditions to produce one representative composite sample for the four-week period. (B) Sample Analysis: Each four-week composite sample must be analyzed for all of the constituents listed in Condition (3). The analytical data, including quality control information, must be compiled and maintained on site for a minimum of three years. These data must be furnished upon request by any employee or representative of EPA or state of Pennsylvania. (2) Waste Holding: The dewatered filter cake waste must be stored as hazardous until the verification analyses are completed. If the four-week composite sample does not exceed any of the delisting levels set in Condition (3), the filter cake waste corresponding to this sample may be managed and disposed of in accordance with all applicable solid waste regulations. If the four-week composite sample exceeds any of the delisting levels set in Condition (3), the filter cake waste generated during the time period corresponding to the four-week composite sample must be retreated until it meets these levels (analyses must be repeated) or managed and disposed of in accordance with Subtitle C of RCRA. Filter cake waste which is generated but for which analyses are not complete or valid must be managed and disposed of in accordance with Subtitle C of RCRA, until valid analyses demonstrated that the waste meets the delisting levels. (3) Delisting Levels: If the concentrations in the four-week composite sample of the filter cake waste for any of the hazardous constituents listed below exceed their respective maximum allowable concentrations (ppm) also listed below, the four-week batch of failing filter cake waste must either be retreated until it meets these levels or managed and disposed of in accordance with Subtitle C of
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	RCRA.
	(A) Inorganics (Leachable):
	Arsenic.....0.79
	Barium.....15.9
	Cadmium.....0.16
	Chromium.....0.79
	Cyanide.....11.1
	Lead.....0.79
	Mercury.....0.032
	Selenium.....0.16
	Silver.....0.79
	Nickel.....11.1
	Leachable metal concentrations must be measured in the filter cake leachate as per 40 CFR 261.24. Cyanide extractions must be conducted using distilled water in place of the leaching media per 40 CFR 261.24.
	(B) Organics:
	Acetone.....2.02E+03
	Acetophenone.....3.53E+04
	Acetonitrile; Methyl cyanide..2.43E+01
	Acrolein.....1.38E+02
	Acrylonitrile.....6.26E-04
	Aldrin.....5.27E-03
	Aniline.....8.72E-01
	Anthracene.....3.01E+02
	Benzene.....3.47E+00
	Benzo[a]anthracene.....5.78E-01
	Benzo[b]fluoranthene.....6.41E-01
	Benzo[k]fluoranthene.....3.04E+03
	Benzo[a]pyrene.....1.51E-01
	gamma-BHC; Lindane.....5.90E-01
	Bis(2-chloroethyl) ether.....6.94E-04
	Bis(2-ethylhexyl) phthalate...1.64E+02
	Bromodichloromethane.....2.94E+03
	Bromoform;
	Tribromomethane..3.76E+03
	Butyl benzyl phthalate.....2.49E+05
	Carbon disulfide.....4.98E+04
	Carbon tetrachloride.....5.49E+00
	Chlordane.....7.51E+01
	p-Chloroaniline.....1.85E+02
	Chlorobenzene.....5.95E+02
	Chlorobenzilate.....1.68E+03
	p-Chloro-m-cresol.....5.18E+02
	Chloroform.....1.94E+00
	2-Chlorophenol.....1.72E+02
	Chrysene.....5.92E+01
	Cresol.....4.91E+03
	2,4-D; 2,4-Dichlorophenoxyacetic acid.....4.17E+02
	4,4'-DDD; DDD.....2.33E+00
	4,4'-DDE; DDE.....3.86E+00
	4,4'-DDT; DDT.....1.21E+01
	Dibenz[a,h]anthracene.....2.86E-02
	Dibromochloromethane;
	Chlorodibromomethane.....
	1,2-Dibromo-3-chloropropane.4.09E-02
	1,2-Dibromoethane; Ethylene dibromide.....2.37E-03
	Di-n-butyl phthalate.....9.84E+05
	o-Dichlorobenzene;
	1,2-Dichlorobenzene.....1.95E+04
	m-Dichlorobenzene;
	1,3-Dichlorobenzene.....1.87E+05
	p-Dichlorobenzene;
	1,4-Dichlorobenzene.....1.03E+03
	3,3'-Dichlorobenzidine.....2.21E-01
	Dichlorodifluoromethane.....4.15E+05
	1,1-Dichloroethane.....4.45E-02
	1,2-Dichloroethane; Ethylene dichloride.....1.45E+00
	1,1-Dichloroethylene.....4.96E+00
	trans-1,2-Dichloroethylene.1.42E+02
	2,4-Dichlorophenol.....1.69E+02
	1,2-Dichloropropane.....2.73E+00
	1,3-Dichloropropene (total cis and trans isomers).....
	Dieldrin.....5.04E-03
	Diethyl phthalate.....1.00E+06
	7,12-
	Dimethylbenz[a]anthracene...1.46E-02
	2,4-Dimethylphenol.....4.87E+01

	Dimethyl phthalate.....1.00E+06
	m-Dinitrobenzene.....5.14E+00
	4,6-Dinitro-o-cresol.....2.00E+02
	2,4-Dinitrophenol.....8.96E+01
	Dinitrotoluene (total of 2,4- and 2,6-isomers).....4.54E-03
	Dinoseb; DNBP.....5.26E+02
	Di-n-octyl phthalate.....1.34E+05
	1,4-Dioxane.....7.89E-02
	Diphenylamine.....4.81E+04
	Disulfoton.....3.34E+00
	Endosulfan I and Endosulfan II (total).....7.74E+01
	Endrin.....3.92E+00
	Ethylbenzene.....1.94E+04
	Fluoranthene.....1.16E+05
	Fluorene.....4.09E+01
	Heptachlor.....1.31E+01
	Heptachlor epoxide.....3.26E+00
	Hexachlorobenzene.....1.02E+00
	Hexachlorobutadiene.....2.01E+01
	Hexachlorocyclopentadiene.....3.23E+04
	Hexachloroethane.....1.15E+01
	Hexachlorophene.....1.22E+04
	Indeno (1,2,3-cd) pyrene.....1.16E+02
	Isobutyl alcohol; Isobutanol..3.22E+04
	Isophorone.....2.86E+00
	Methacrylonitrile;
	2-methyl-2-Propenenitrile...5.77E-01
	Methoxychlor.....1.03E+05
	Methylbromide;
	Bromomethane...1.41E+02
	Methyl chloride;
	Chloromethane.....3.22E+04
	Methylene chloride;
	Dichloromethane.....9.07E-01
	Methyl ethyl ketone;
	2-Butanone.....1.50E+03
	Methyl methacrylate.....5.08E+05
	Methyl parathion; Phosphorothioic acid.....5.27E+01
	4-Methyl-2-pentanone; Methyl isobutyl ketone.....
	Naphthalene.....1.00E+06
	Nitrobenzene.....2.56E+01
	N-Nitroso-di-n-butylamine....8.15E-05
	N-Nitrosodiethylamine.....2.00E-07
	N-Nitrosodimethylamine.....2.19E-05
	N-Nitrosodiphenylamine.....4.55E+01
	N-Nitrosodipropylamine;
	Di-n-propyl nitrosamine; N-Nitrosodi-n-propylamine.....5.02E-05
	Nitrosopyrrolidine;
	N-Nitrosopyrrolidine;
	1-nitroso-Pyrrolidine.....3.06E-05
	Polychlorinated biphenyls;...4.77E+01
	Pentachlorobenzene.....8.91E+03
	Pentachloronitrobenzene.....2.82E+00
	Pentachlorophenol.....1.14E+04
	Phenanthrene.....5.46E+01
	Phenol.....8.00E+04
	Pronamide.....2.13E+05
	Pyrene.....1.00E+06
	Pyridine.....1.31E+01
	Silvex; 2,4,5-TP;
	2-(2,4,5-trichlorophenoxy)-Propanoic acid.....3.87E+01
	Styrene.....9.14E+00
	2,4,5-T; 2,4,5-Trichlorophenoxyacetic acid.....6.63E+03
	1,2,4,5-Tetrachlorobenzene....2.19E+02
	1,1,2,2-Tetrachloroethane.....2.28E-02
	Tetrachloroethane;
	Tetrachloroethylene.....1.34E+01
	2,3,4,6-Tetrachlorophenol....1.17E+04
	Tetraethyl
	dithiopyrophosphate.....2.51E+02
	Toluene.....4.58E+04
	Toxaphene.....3.09E+02
	1,2,4-Trichlorobenzene.....4.75E+04
	1,1,1-Trichloroethane.....8.70E+02
	1,1,2-Trichloroethane.....9.03E-02
	Trichloroethylene;
	Trichloroethene.....4.47E+00

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		Trichlorofluoromethane.....3.31E+05
		2,4,5-Trichlorophenol.....8.20E+04
		2,4,6-Trichlorophenol.....1.38E+00
		1,2,3-Trichloropropane.....5.46E+02
		sym-Trinitrobenzene.....2.17E+00
		Vinyl chloride.....7.11E-01
		Xylene (total).....8.49E+05
Goodyear	Randleman,	Dewatered wastewater treatment sludge
Tires	NC	(EPA Hazardous Waste No. F006)
and Rubber		generated from electroplating
Co		operations
Gould, Inc.	McConnellsville	Hazardous Waste No. F006) generated
	OH	from electroplating operations after
		November 27, 1985.
Hanover Wire	Hanover,	Dewatered filter cake (EPA Hazardous
Cloth	Pennsylvania	Waste No. F006) generated from
Division		electroplating operations after 8/15/86
Hoechst Celanese	Bucks,	Distillation bottoms generated (at a
Corporation	Alabama	maximum annual rate of 31,500 cubic
-		yards) from the production of so-
		dium hydrosulfite (EPA Hazardous
		Waste No. F003). This exclusion was
		published on July 17, 1990. This
		exclusion does not include the waste
		contained in Hoechst Celanese's
		on-site surface impoundment.
Hoechst	Leeds,	Distillation bottoms generated (at a
Celanese	South	maximum annual rate of 38,500 cubic
Corporation	Carolina	yards) from the production of so-
		dium hydrosulfite (EPA Hazardous
		Waste No. F003). This exclusion was
		published on July 17, 1990.
Holston Army	Kingsport,	Dewatered wastewater treatment sludges
Ammunition	Tennessee	(EPA Hazardous Waste Nos. F003,
Plant		F005, and K044) generated from the
		manufacturing and processing of
		explosives and containing spent
		non-halogenated solvents after 11/14/86
Imperial	Salem, IN	Solid resin cakes containing EPA
Clevite		Hazardous Waste No. F002 generated
		after August 27, 1985, from solvent
		recovery operations.
Indiana Steel	Muncie, IN	Dewatered wastewater treatment sludges
& Wire Corp		(EPA Hazardous Waste Nos. F006 and
		K062) generated from elec-
(formerly		troplating operations and steel
General		finishing operations after October
Cable Co.)		24, 1986. This exclusion does not
		apply to sludges in any on-site
		impoundments as of this date.
International	Terre Haute,	Spent non-halogenated solvents and
Minerals and	IN	still bottoms (EPA Hazardous Waste
Chemical		No. F003) generated from the
Corporation		recovery of n-butyl alcohol after
		August 15, 1986.
Kawneer Co	Springdale,	Wastewater treatment filter press
Incorporated	Arkansas	sludge (EPA Hazardous Waste No.
		F019) generated (at a maximum annual
		rate of 26 cubic yards) from the
		chemical conversion coating of
		aluminum. This exclusion was
		published on November 13, 1990.
Kay-Fries,	Stoney	Biological aeration in lagoon sludge
Inc.	Point, NY	and filter press sludge generated
		after September 21, 1984, which
		contain EPA Hazardous Waste Nos
		F003 and F005 as well as that
		disposed of in a holding lagoon as
		of September 21, 1984
Keymark	Fonda, NY	Wastewater treatment sludge (EPA
Corp		Hazardous Waste No. F019) generated
		from chemical conversion coating of
		aluminum after November 27, 1985.
Keymark	Fonda, NY	Wastewater treatment sludges (EPA
Corp.		Hazardous Waste No. F019) generated
		from the chemical conversion coating
		of aluminum and contained in an
		on-site impoundment on August 12,
		1987. This is a one-time exclusion.
Lederle	Pearl River,	Spent non-halogenated solvents and
Laboratories	NY	still bottoms (EPA Hazardous Waste
		Nos. F003 and F005) generated from
		the recovery of the following
		solvents: Xylene, acetone, ethyl

		acetate, ethyl ether, methyl
		isobutyl ketone, n-butyl alcohol,
		cyclohexanone, methanol, toluene,
		and pyridine after August 2, 1988.
		Excursion applies to primary and
		secondary filter press sludges and
		compost soils generated from these
		sludges.
Lincoln	Lincoln, NE	Wastewater treatment sludges (EPA
Plating Co		Hazardous Waste No. F006)
		generated from electroplating op-
		erations after November 17, 1986.
Loxscreen	Hayti, MO	Dewatered wastewater treatment sludges
Co, Inc		(EPA Hazardous Waste No. F019)
		generated from the chemical
		conversion coating of aluminum after
		July 16, 1986.
MAHLE, Inc	Morristown,	Wastewater treatment sludge filter
	Tennessee	cake (EPA Hazardous Waste No. F019)
		generated from the chemical
		conversion coating of aluminum
		(generated at a maximum annual rate
		of 33 cubic yards), after August 21,
		1992. In order to confirm that the
		characteristics of the waste do not
		change significantly, the facility
		must, on an annual basis, sample and
		test for the constituents listed in
		40 CFR 261.24 using the method
		specified therein. The annual
		analytical results (including
		quality control information) must be
		compiled, certified according to 40
		CFR 260.22(i)(12), maintained
		on-site for a minimum of five years,
		and made available for inspection
		upon request by representatives of
		EPA or the State of Tennessee.
		Failure to maintain the required
		records on-site will be considered
		by EPA, at its discretion,
		sufficient basis to revoke the
		exclusion to the extent directed by
		EPA.
Marquette	Milwaukee,	Wastewater treatment sludge (EPA
Electronics	Wisconsin	Hazardous Waste No. F006) generated
Incorporated		from electroplating operations. This
		exclusion was published on 4/20/89
Martin Marietta	Ocala, Florida	Dewatered wastewater treatment sludges
Aerospace		(EPA Hazardous Waste No. F006)
		generated from electroplating
		operations after January 23, 1987.
Mason	Bay St.	Wastewater treatment sludge filter
Chamberlain,	Louis,	cake (EPA Hazardous Waste No. F019)
Incorporated	Mississippi.	generated (at a maximum annual rate
		of 1,262 cubic yards) from the
		chemical conversion coating of
		aluminum. This exclusion was pub-
		lished on October 27, 1989.
Maytag	Newton, IA	Wastewater treatment sludges (EPA
Company		Hazardous Waste No. F006) generated
		from electroplating operations and
		wastewater treatment sludges (EPA
		Hazardous Waste No. F019) generated
		from the chemical conversion coating
		of aluminum November 17, 1986.
McDonnell	Tulsa,	Stabilized wastewater treatment
Douglas	Oklahoma	sludges from surface impoundments
Corporation		previously closed as a landfill (at
		a maximum generation of 85,000 cubic
		yards on a one- time basis). EPA
		Hazardous Waste No. F019, F002,
		F003, and F005 generated at U.S. Air
		Force Plant No. 3, Tulsa, Oklahoma
		and is disposed of in Subtitle D
		landfills after February 26, 1999
		McDonnell Douglas must implement a
		testing program that meets the
		following conditions for the
		exclusion to be valid:
		(1) Delisting Levels:All
		leachable concentrations for the
		constituents in Conditions (1)(A)
		and (1)(B) in the approximately

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		5,000 cubic yards of combined
		stabilization materials and
		excavated sludges from the bottom
		portion of the northwest lagoon of
		the surface impoundments which are
		closed as a landfill must not exceed
		the following levels (ppm) after the
		stabilization process is completed
		in accordance with Condition (3).
		Constituents must be measured in the
		waste leachate by the method
		specified in 40 CFR 261.24. Cyanide
		extractions must be conducted using
		distilled water in the place of the
		leaching media per 40 CFR 261.24.
		Constituents in Condition (1)(C)
		must be measured as the total
		concentrations in the waste(ppm).
		(A) Inorganic Constituents (leachate)
		Antimony-0.336; Cadmium-0.280;
		Chromium (total)-5.0; Lead-0.84;
		Cyanide-11.2;
		(B) Organic Constituents (leachate)
		Benzene-0.28;
		trans-1,2-Dichloroethene-5.6; Te-
		trachloroethylene-0.280;
		Trichloroethylene-0.280
		(C) Organic Constituents (total
		analysis).
		Benzene-10.; Ethylbenzene-10.;
		Toluene-30.; Xylenes-30.;
		trans-1,2-Dichloroethene-30.;
		Tetrachloroethylene -6.0;
		Trichloroethylene-6.0.
		McDonnell Douglas Corporation shall
		control volatile emissions from the
		stabilization process by collection
		of the volatile chemicals as they
		are emitted from the waste but
		before release to the ambient air.
		and the facility shall use dust
		control measures. These two controls
		must be adequate to protect human
		health and the environment.
		The approximately 80,000 cubic yards
		of previously stabilized waste in
		the upper northwest lagoon, entire
		lagoon of the surface impoundments
		which were closed as a landfill
		requires no verification testing.
		McDonnell Douglas must store as
		hazardous all stabilized waste from
		the bottom portion of the northwest
		lagoon area of the closed landfill
		as generated until verification
		testing as specified in Condition
		(3), is completed and valid analyses
		demonstrate that Condition (1) is
		satisfied. If the levels of
		constituents measured in the sam-
		ples of the stabilized waste do not
		exceed the levels set forth in
		Condition (1), then the waste is
		nonhazardous and may be managed and
		disposed of in a Subtitle D landfill
		in accordance with all applicable
		solid waste regulations. If
		constituent levels in a sample
		exceed any of the delisting levels
		set in Condition (1), the waste
		generated during the time period
		corresponding to this sample must be
		restabilized until delisting levels
		are met or managed and disposed of
		in accordance with RCRA Subtitle C
		(3) Verification Testing
		Requirements:Sample collection
		and analyses, including quality
		control procedures, must be
		performed according to SW-846
		methodologies. McDonnell Douglas
		must stabilize the
		previously unstabilized waste from
		the bottom portion of the northwest

		lagoon of the surface impoundment
		(which was closed as a landfill)
		using fly ash, kiln dust or similar
		accepted materials in batches of 500
		cubic yards or less. McDonnell
		Douglas must analyze one composite
		sample from each batch of 500 cubic
		yards or less. A minimum of four
		grab samples must be taken from each
		waste pile (or other designated
		holding area) of stabilized waste
		generated from each batch run. Each
		composited batch sample must be
		analyzed, prior to disposal of the
		waste in the batch represented by
		that sample, for constituents listed
		in Condition (1). There are no
		verification testing requirements
		for the stabilized wastes in the
		upper portions of the northwest
		lagoon, the entire northeast lagoon,
		and the entire south lagoon of the
		surface impoundments which were
		closed as a landfill.
		(4) Changes in Operating
		Conditions:If McDonnell Douglas
		significantly changes the
		stabilization process established
		under Condition (3) (e.g., use of
		new stabilization agents), McDonnell
		Douglas must notify the Agency in
		writing. After written approval by
		EPA, McDonnell Douglas may handle
		the wastes generated as
		non-hazardous, if the wastes meet
		the delisting levels set in Condition (1).
		(5) Data Submittals:Records
		of operating conditions and
		analytical data from Condition (3)
		must be compiled, summarized, and
		maintained on site for a minimum of
		five years. These records and data
		must be furnished upon request by
		EPA, or the State of Oklahoma, or
		both, and made available for
		inspection. Failure to submit the
		required data within the specified
		time period or maintain the required
		records on site for the specified
		time will be considered by EPA, at
		Residue and the Limestone Sludge
		revoke the exclusion to the extent
		directed by EPA. All data must be
		accompanied by a signed copy of the
		following certification statement to
		attest to the truth and accuracy of
		the data submitted:
		Under civil and criminal penalty of
		law for the making or submission of
		false or fraudulent statements or
		representations (pursuant to the
		applicable provisions of the Federal
		Code, which include, but may not be
		limited to, 18 U.S.C. 1001 and 42
		U.S.C. 6928), I certify that the
		information contained in or
		accompanying this document is true,
		accurate and complete.
		As to the (those) identified
		section(s) of this document for
		which I cannot personally verify its
		(their) truth and accuracy, I
		certify as the company official
		having supervisory responsibility
		for the persons who, acting under my
		direct instructions, made the
		verification that this information
		is true, accurate and complete.
		In the event that any of this
		information is determined by EPA in
		its sole discretion to be false,
		inaccurate or incomplete, and upon
		conveyance of this fact to the
		company, I recognize and agree that

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		this exclusion of waste will be void as if it never had effect or to the extent directed by EPA and that the company will be liable for any actions taken in contravention of the company's RCRA and CERCLA obligations premised upon the company's reliance on the void exclusion.
		(6) Reopener Language
		(a) If McDonnell Douglas discovers that a condition at the facility or an assumption related to the disposal of the excluded waste that was modeled or predicted in the petition does not occur as modeled or predicted, then McDonnell Douglas must report any information relevant to that condition, in writing, to the Regional Administrator or his delegate within 10 days of discovering that condition.
		(b) Upon receiving information described in paragraph (a) from any source, the Regional Administrator or his delegate will determine whether the reported condition requires further action. Further action may include revoking the exclusion, modifying the exclusion, or other appropriate response necessary to protect human health and the environment.
		(7) Notification Requirements:
		McDonnell Douglas must provide a one-time written notification to any State Regulatory Agency to which or through which the delisted waste described above will be transported for disposal at least 60 days prior to the commencement of such activity. The one-time written notification must be updated if the delisted waste is shipped to a different disposal facility. Failure to provide such a notification will result in a violation of the delisting petition and a possible revocation of the decision.
Merck & Company, Incorporated	Elkton, Virginia	One-time exclusion for fly ash (EPA Hazardous Waste No. F002) from the incineration of wastewater treatment sludge generated from pharmaceutical production processes and stored in an on-site fly ash lagoon. This exclusion was published on May 12, 1989.
Metropolitan Sewer District of Greater Cincinnati	Cincinnati, OH	Sluiced bottom ash sludge (approximately 25,000 cubic yards), contained in the North Lagoon, on September 21, 1984, which contains EPA Hazardous Wastes Nos. F001, F002, F003, F004, and F005.
Michelin Tire Corp.	Sandy Springs, South Carolina	Dewatered wastewater treatment sludge (EPA Hazardous Wastes No. F006) generated from electroplating operations after November 14, 1986.
Monroe Auto Equipment	Paragould, AR	Wastewater treatment sludge (EPA Hazardous Waste No. F006) generated from electroplating operations after vacuum filtration after November 27, 1985. This exclusion does not apply to the sludge contained in the on-site impoundment.
North American Philips Consumer Electronics Corporation	Greenville, Tennessee	Wastewater treatment sludges (EPA Hazardous Waste No. F006) generated from electroplating operations. This exclusion was published on April 20, 1989.
Occidental Chemical.	Ingleside, Texas.	Limestone Sludge, (at a maximum generation 1,114 cubic yards per calendar year) Rockbox Residue, (at a maximum generation of 1,000 cubic yards per calendar year) generated

		by Occidental Chemical using the wastewater treatment process to treat the Rockbox Residue and the Limestone Sludge (EPA Hazardous Waste No. F025, F001, F003, and F005) generated at Occidental Chemical.
		Occidental Chemical must implement a testing program that meets the following conditions for the exclusion to be valid:
		(1) Delisting Levels: All concentrations for the following constituents must not exceed the following levels (ppm). The Rockbox Residue and the Limestone Sludge, must be measured in the waste leachate by the method specified in 40 CFR Part 261.24.
		(A) Rockbox Residue:
		(i) Inorganic Constituents:
		Barium-100; Chromium-5; Copper-130; Lead-1.5; Selenium-1; Tin-2100; Vanadium-30; Zinc-1,000
		(ii) Organic Constituents:
		Acetone-400;
		Bromodichloromethane-0.14;
		Bromoform-1.0;
		Chlorodibromomethane-0.1;
		Chloroform-1.0; Dichloromethane-1.0; Ethylbenzene-7,000; 2,3,7,8-TCDD Equivalent-0.00000006
		(B) Limestone Sludge
		(i) Inorganic Constituents:
		Antimony-0.6; Arsenic-5; Barium-100; Beryllium-0.4; Chromium-5; Cobalt-210; Copper-130; Lead-1.5; Nickel-70; Selenium-5; Silver-5; Vanadium-30; Zinc-1,000
		(ii) Organic Constituents
		Acetone-400; Bromoform-1.0; Chlorodibromomethane-0.1; Dichloromethane-1.0; Diethyl phthalate-3,000; Ethylbenzene-7,000; 1,1,1-Trichloroethane-20; Toluene-700; Trichlorofluoromethane-1,000; Xylene-10,000; 2,3,7,8-TCDD Equivalent-0.00000006;
		(2) Waste Holding and Handling: Occidental Chemical must store in accordance with its RCRA permit, or continue to dispose of as hazardous waste all Rockbox Residue and the Limestone Sludge generated until the verification testing described in Condition (3)(B), as appropriate, is completed and valid analyses demonstrate that condition (3) is satisfied. If the levels of constituents measured in the samples of the Rockbox Residue and the Limestone Sludge do not exceed the levels set forth in Condition (1), then the waste is nonhazardous and may be managed and disposed of in accordance with all applicable solid waste regulations. If constituent levels in a sample exceed any of the delisting levels waste generated during the time period corresponding to this sample must be managed and disposed of in accordance with Subtitle C of RCRA.
		(3) Verification Testing
		Requirements: Sample collection and analyses, including quality control procedures, must be performed according to SW-846 methodologies. If EPA judges the incineration process to be effective under the operating conditions used during the initial verification testing, Occidental Chemical may

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	replace the testing required in
	Condition (3)(A) with the testing
	required in Condition (3)(B).
	Occidental Chemical must continue to
	test as specified in Condition
	(3)(A) until and unless notified by
	EPA in writing that testing in
	Condition (3)(A) may be replaced by
	Condition (3)(B).
	(A) Initial Verification
	Testing: (i) During the first
	40 operating days of the Incinerator
	Offgas Treatment System after the
	final exclusion is granted,
	Occidental Chemical must collect and
	analyze composites of the Limestone
	Sludge. Daily composites must be
	representative grab samples
	collected every 6 hours during each
	unit operating cycle. The two wastes
	must be analyzed, prior to disposal,
	for all of the constituents listed
	in Paragraph 1. The waste must also
	be analyzed for pH. Occidental
	Chemical must report the op-
	erational and analytical test data,
	including quality control
	information, obtained during this
	initial period no later than 90 days
	after the generation of the two wastes.
	(ii) When the Rockbox unit is
	decommissioned for cleanout, after
	the final exclusion is granted,
	Occidental Chemical must collect and
	analyze composites of the Rockbox
	Residue. Two composites must be com-
	posed of representative grab samples
	collected from the Rockbox unit. The
	waste must be analyzed, prior to
	disposal, for all of the
	constituents listed in Paragraph 1.
	The waste must be analyzed for pH.
	No later than 90 days after the
	Rockbox is decommissioned for
	cleanout the first two times after
	this exclusion becomes final,
	Occidental Chemical must report the
	operational and analytical test
	data, including quality control
	information.
	(B) Subsequent Verification
	Testing: Following written
	notification by EPA, Occidental
	Chemical may substitute the testing
	conditions in (3)(B) for (3)(A)(i).
	Occidental Chemical must continue to
	monitor operating conditions,
	analyze samples representative of
	each quarter of operation during the
	first year of waste generation. The
	samples must represent the waste
	generated over one quarter. (This
	provision does not apply to the
	Rockbox Residue.)
	(C) Termination of Organic
	Testing for the Limestone
	Occidental Chemical must
	continue testing as required under
	Condition (3)(B) for organic
	constituents specified under
	Condition (3)(B) for organic
	constituents specified in Condition
	(1)(A)(ii) and (1)(B)(ii) until the
	analyses submitted under Condition
	(3)(B) show a minimum of two
	consecutive quarterly samples below
	the delisting levels in Condition
	(1)(A)(ii) and (1)(B)(ii),
	Occidental Chemical may then request
	that quarterly organic testing be
	terminated. After EPA notifies
	Occidental Chemical in writing it
	may terminate quarterly organic
	testing. Following termination of

	the quarterly testing, Occidental
	Chemical must continue to test a
	representative composite sample for
	all constituents listed in Condition
	(1) on an annual basis (no later
	than twelve months after exclusion).
	(4) Changes in Operating
	Conditions: If Occidental
	Chemical significantly changes the
	process which generate(s) the
	waste(s) and which may or could
	affect the composition or type
	waste(s) generated as established
	under Condition (1) (by
	illustration, but not limitation,
	change in equipment or operating
	conditions of the treatment
	process), Occidental Chemical must
	notify the EPA in writing and may no
	longer handle the wastes generated
	from the new process or no longer
	discharges as nonhazardous until the
	wastes meet the delisting levels set
	Condition (1) and it has received
	written approval to do so from EPA.
	(5) Data Submittals: The
	data obtained through Condition 3
	must be submitted to Mr. William
	Gallagher, Chief, Region 6 Delisting
	Program, U.S. EPA, 1445 Ross Ave,
	Dallas, Texas 75202-2733, Mail Code,
	(6PD-O) within the time period
	specified. Records of operating
	conditions and analytical data from
	Condition (1) must be compiled,
	summarized, and maintained on site
	for a minimum of five years. These
	records and data must be furnished
	upon request by EPA, or the State of
	Texas, and made available for
	inspection. Failure to submit the
	required data within the specified
	time period or maintain the required
	records on site for the specified
	time will be considered by EPA, at
	its discretion, sufficient basis to
	revoke the exclusion to the extent
	directed by EPA. All data must be
	accompanied by a signed copy of the
	following certification statement to
	attest to the truth and accuracy of
	the data submitted:
	Under civil and criminal penalty of
	law for the making or submission of
	false or fraudulent statements or
	representations (pursuant to the
	applicable provisions of the Federal
	Code, which include, but may not be
	limited to, 18 U.S.C. 1001 and 42
	U.S.C. 6928), I certify that the
	information contained in or
	accompanying this document is true,
	accurate and complete.
	As to the (those) identified
	section(s) of this document for
	which I cannot personally verify its
	(their) truth and accuracy, I
	certify as the company official
	having supervisory responsibility
	for the persons who, acting under my
	direct instructions, made the
	verification that this information
	is true, accurate and complete.
	In the event that any of this
	information is determined by EPA in
	its sole discretion to be false,
	inaccurate or incomplete, and upon
	conveyance of this fact to the
	company, I recognize and agree that
	this exclusion of waste will be void
	as if it never had effect or to the
	extent directed by EPA and that the
	company will be liable for any
	actions taken in contravention of

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		the company's RCRA and CERCLA obligations premised upon the company's reliance on the void exclusion.
		(6) Reopener:(a) If Occidental Chemical discovers that a condition at the facility or an assumption related to the disposal of the excluded waste that was modeled or predicted in the petition does not occur as modeled or predicted, then Occidental Chemical must report any information relevant to that condition, in writing, to the Director of the Multimedia Planning and Permitting Division or his delegate within 10 days of discovering that condition. (b) Upon receiving information described in paragraph (a) from any source, the Director or his delegate will determine whether the reported condition requires further action. Further action may include revoking the exclusion, modifying the exclusion, or other appropriate response necessary to protect human health and the environment.
		(7) Notification Requirements: Occidental Chemical must provide a one-time written notification to any State Regulatory Agency to which or through which the delisted waste described above will be transported for disposal at least 60 days prior to the commencement of such activities. Failure to provide such a notification will result in a violation of the delisting petition and a possible revocation of the decision.
Philway Products, Incorporated	Ashland, Ohio	Filter press sludge generated (at a maximum annual rate of 96 cubic yards) during the treatment of electroplating wastewaters using lime (EPA Hazardous Waste No. F006). This exclusion was published on October 26, 1990.
Plastene Supply Company	Portageville, Missouri	Dewatered wastewater treatment sludges (EPA Hazardous Waste No. F006) generated from electroplating operations after August 15, 1986.
POP Fasteners	Shelton, Connecticut	Wastewater treatment sludge (EPA Hazardous Waste No. F006) generated from electroplating operations (at a maximum annual rate of 1,000 cubic yards) after September 19, 1994. In order to confirm that the characteristics of the waste do not change significantly, the facility must, on an annual basis, analyze a representative composite sample for the constituents listed in 261.24 using the method specified therein. The annual analytical results, including quality control information, must be compiled, certified according to 260.22(i)(12), maintained on site for a minimum of five years, and made available for inspection upon request by any employee or representative of EPA or the State of Connecticut. Failure to maintain the required records on site will be considered by EPA, at its discretion, sufficient basis to revoke the exclusion to the extent directed by EPA.
Reynolds Metals Company	Sheffield, AL	Dewatered wastewater treatment sludges (EPA Hazardous Waste No. F019) generated from the chemical conversion coating of aluminum after

		August 15, 1986.
Reynolds Metals Company	Sheffield, AL	Wastewater treatment filter press sludge (EPA Hazardous Waste No. F019) generated (at a maximum annual rate of 3,840 cubic yards) from the chemical conversion coating of aluminum. This exclusion was published on July 17, 1990.
Siegel-Robert, Inc.	St. Louis, MO	Wastewater treatment sludge (EPA Hazardous Waste No. F006) generated from electroplating operations after November 27, 1985.
Square D Company	Oxford, Ohio	Dewatered filter press sludge (EPA Hazardous Waste No. F006) generated from electroplating operations after August 15, 1986.
Syntex Agribusiness	Springfield, MO	Kiln ash, cyclone ash, separator sludge, and filtered wastewater (except spent activated carbon) (EPA Hazardous Waste No. F020) generated during the treatment of wastewater treatment sludge by the EPA's Mobile Incineration System at the Denney Farm Site in McDowell, Missouri after June 2, 1988, so long as:
		(1) The incinerator is monitored continuously and is in compliance with operating permit conditions. Should the incinerator fail to comply with the permit conditions relevant to the mechanical operation of the incinerator, Syntex must test the residues generated during the run when the failure occurred according to the requirements of Conditions (2) through (6), regardless of whether or not the demonstration in Condition (7) has been made.
		(2) Four grab samples of wastewater must be composited from the volume of filtered wastewater collected after each eight hour run and, prior to disposal the composite samples must be analyzed for the EP toxic metals, nickel, and cyanide. If arsenic, chromium, lead, and silver EP leachate test results exceed 0.61 ppm; barium levels exceed 12 ppm; cadmium and selenium levels exceed 0.12 ppm; mercury levels exceed 0.02 ppm; nickel levels exceed 6.1 ppm; or cyanide levels exceed 2.4 ppm, the wastewater must be retreated to achieve these levels or must be disposed in accordance with all applicable hazardous waste regulations. Analyses must be performed according to SW-846 methodologies.
		(3) One grab sample must be taken from each drum of kiln and cyclone ash generated during each eight hour run; all grabs collected during a given eight hour run must then be composited to form one composite sample. A composite sample of four grab samples of the separator sludge must be collected at the end of each eight hour run. Prior to the disposal of the residues from each eight hour run, an EP leachate test must be performed on these composite samples and the leachate analyzed for the EP toxic metals, nickel, and cyanide (using a distilled water extraction for the cyanide extraction) to demonstrate that the following maximum allowable treatment residue concentrations listed below are not exceeded. Analyses must be performed according to SW-846 methodologies. Any residues which exceed any of the

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	levels listed below must be
	retreated to achieve these levels or
	must be disposed in accordance with
	all applicable hazardous waste
	regulations.
	Maximum Allowable Solids Treatment
	Residue EP Leachate Concentrations
	(mg/L)
	Arsenic-1.6
	Barium-32
	Cadmium-0.32
	Chromium-1.6
	Lead-1.6
	Mercury-0.065
	Nickel-16
	Selenium-0.32
	Silver-1.6
	Cyanide-6.5
	(4)-If Syntex stabilizes any of the
	kiln and cyclone ash or separator
	sludge, a Portland cement-type
	stabilization process must be used
	and Syntex must collect a com-
	posite sample of four grab samples
	from each batch of stabilized waste.
	An MEP leachate test must be per-
	formed on these composite samples
	and the leachate analyzed for the EP
	toxic metals, nickel, and cyanide
	(using a distilled water extraction
	for the cyanide leachate analysis)
	to demonstrate that the maximum
	allowable treatment residue
	concentrations listed in Condition
	(3) are not exceeded during any run
	of the MEP extraction. Analyses must
	be performed according to SW-846
	methodologies. Any residues which
	exceed any of the levels listed in
	Condition (3) must be retreated to
	achieve these levels or must be
	disposed in accordance with all
	applicable hazardous waste
	regulations. (If the residues are
	stabilized, the analyses required in
	this condition supercede the
	analyses required in Condition (3).)
	(5) Syntex must generate, prior to
	disposal of residues, verification
	data from each eight hour run from
	each treatment residue (i.e. kiln and
	Cyclone ash, separator sludge, & filtered
	wastewater) to demonstrate that the
	maximum allowable treatment residue
	concentrations listed below are not
	exceeded. Samples must be collected
	as specified in Conditions (2) and
	(3). Analyses must be performed
	according to SW-846 methodologies.
	Any solid or liquid residues which
	exceed any of the levels listed
	below must be retreated to achieve
	these levels or must be disposed in
	accordance with Subtitle C of RCRA.
	Maximum Allowable Wastewater
	Concentrations (ppm):
	Benz(a)anthracene -
	1X10-4
	Benzo(a)pyrene - 4X10-5
	Benzo(b)fluoranthene -
	2X10-4
	Chloroform - 0.07
	Chrysene - 0.002
	Dibenz(a,h)anthracene -
	9X10-6
	1,2-Dichloroethane - 0.06
	Dichloromethane - 0.06
	Indeno(1,2,3-cd)pyrene - 0.002
	Polychlorinated biphenyls - 1x10-4
	1,2,4,5-Tetrachlorobenzene - 0.13
	2,3,4,6-Tetrachlorophenol - 12
	Toluene - 120
	Trichloroethylene - 0.04
	2,4,5-Trichlorophenol - 49

	2,4,6-Trichlorophenol - 0.02
	Maximum Allowable Solid Treatment
	Residue Concentrations (ppm):
	Benz(a)anthracene - 1.1
	Benzo(a)pyrene - 0.43
	Benzo(b)fluoranthene - 1.8
	Chloroform - 5.4
	Chrysene - 170
	Dibenz(a,h)anthracene - 0.083
	Dichloromethane - 2.4
	1,2-Dichloroethane - 4.1
	Indeno(1,2,3-cd)pyrene - 330
	Polychlorinated biphenyls - 0.31
	1,2,4,5-Tetrachlorobenzene - 720
	Trichloroethylene - 6.6
	2,4,6-Trichlorophenol - 3.9
	(6) Syntex must generate, prior to
	disposal of residues, verification
	data from each eight hour run for
	each treatment residue
	(i.e., kiln and cyclone
	ash, separator sludge, and filtered
	wastewater) to demonstrate that the
	residues do not contain tetra-,
	penta-, or
	hexachlorodibenzo-p-dioxins or
	furans at levels of regulatory
	concern. Samples must be collected
	as specified in Conditions (2) and
	(3). The TCDD equivalent levels for
	wastewaters must be less than 2 ppq
	and less than 5 ppt for the solid
	treatment residues. Any residues
	with detected dioxins or furans in
	excess of these levels must be
	retreated or must be disposed as
	acutely hazardous. Method 8290, a
	high resolution gas chromatography
	and high resolution mass spec-
	troscopy (HRGC/HRMS) analytical
	method, must be used. For tetra- and
	pentachlorinated dioxin and furan
	homologs, the maximum practical
	quantitation limit must not exceed
	15 ppt for solids and 120 ppq for
	wastewaters. For hexachlorinated
	homologs, the maximum practical
	quantitation limit must not exceed
	37 ppt for solids and 300 ppq for
	wastewaters.
	(7)(A) The test data from Conditions
	(1), (2), (3), (4), (5) and (6) must
	be kept on file by Syntex for
	inspection purposes and must be
	compiled, summarized, and submitted
	to the Section Chief, Variances
	Section, PSPD/OSW (WH-563), US
	EPA,
	401 M Street, S.W., Washington, D.C.
	20460 by certified mail on a monthly
	basis and when the treatment of the
	lagoon sludge is concluded. All data
	submitted will be placed in the RCRA
	docket.
	(B) The testing requirements for
	Conditions (2), (3), (4), (5), and
	(6) will continue until Syntex
	provides the Section Chief,
	Variances Section, with the results
	of four consecutive batch analyses
	for the petitioned wastes, none of
	which exceed the maximum allowable
	treatment residue concentrations
	listed in these conditions and the
	Section Chief, Variances Section,
	notifies Syntex that the conditions
	have been lifted.
	(8) Syntex must provide a signed copy
	of the following certification
	statement when submitting data in
	response to the conditions listed
	above: Under civil and criminal
	penalty of law for the making or
	submission of false or fraudulent

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		statements or representations, I
		certify that the information
		contained in or accompanying this
		document is true, accurate, and
		complete. As to the (those)
		identified section(s) of this
		document for which I cannot
		personally verify its (their)
		accuracy, I certify as the company
		official having supervisory re-
		sponsibility for the persons who,
		acting under my direct instructions,
		made the verification that this
		information is true, accurate and
		complete.
SR of	Ripley.	Dewatered wastewater treatment sludges
Tennessee.	TN	(EPA Hazardous Waste No. F006)
		generated from the copper, nickel,
		and chromium electroplating of
		plastic parts after November 17, 1986
Tennessee	Ripley,	Dewatered wastewater treatment sludges
Electro-	Tennessee	(EPA Hazardous Waste Nos. F006)
plating		generated from electroplating
		operations after November 17, 1986.
		To ensure chromium levels do not
		exceed the regulatory standards
		there must be continuous batch
		testing of the filter press sludge
		for chromium for 45 days after the
		exclusion is granted. Each batch of
		treatment residue must be
		representatively sampled and tested
		using the EP toxicity test for
		chromium. This data must be kept on
		file at the facility for inspection
		purposes. If the extract levels
		exceed 0.922 ppm of chromium the
		waste must be managed and disposed
		of as hazardous. If these conditions
		are not met, the exclusion does not
		apply. This exclusion does not apply
		to sludges in any on-site
		impoundments as of this date.
Tennessee	Ripley, TN	Wastewater treatment sludge (EPA
Electro-		Hazardous Waste No. F006) generated
plating.		from electroplating operations and
		contained in an on-site surface
		impoundment (maximum volume of
		6,300 cubic yards). This is a one-time
		exclusion. This exclusion was
		published on April 8, 1991.
Texas	Longview,	Incinerator ash (at a maximum
Eastman	Texas	generation of 7,000 cubic yards per
		calendar year) generated from the
		incineration of sludge from the
		wastewater treatment plant (EPA
		Hazardous Waste No. D001, D003,
		D018, D019, D021, D022, D027, D028,
		D029, D030, D032, D033, D034, D035,
		D036, D038, D039, D040, F001, F002,
		F003, F005, and that is disposed of
		in Subtitle D landfills after
		September 25, 1996. Texas Eastman
		must implement a testing program
		that meets the following conditions
		for the petition to be valid:
		1. Delisting Levels: All
		leachable concentrations for those
		metals must not exceed the following
		levels (mg/l). Metal concentrations
		must be measured in the waste
		leachate by the method specified in
		40 CFR 261.24.
		(A) Inorganic Constituents
		Antimony-0.27; Arsenic-2.25;
		Barium-90.0; Beryllium-0.0009;
		Cadmium-0.225; Chromium-4.5;
		Cobalt-94.5; Copper-58.5;
		Lead-0.675; Mercury-0.045;
		Nickel-4.5; Selenium-1.0;
		Silver-5.0; Thallium-0.135;
		Tin-945.0; Vanadium-13.5;
		Zinc-450.0
		(B) Organic Constituents

		Acenaphthene-90.0; Acetone-180.0;
		Benzene-0.135;
		Benzo(a)anthracene-0.00347;
		Benzo(a)pyrene-0.00045; Benzo(b)
		fluoranthene-0.00320; Bis(2 ethyl-
		hexyl) phthalate-0.27; Butylbenzyl
		phthalate-315.0; Chloroform-0.45;
		Chlorobenzene-31.5; Carbon Disul-
		fide-180.0; Chrysene-0.1215;
		1,2-Dichlorobenzene-135.0;
		1,4-Dichlorobenzene-0.18;
		Di-n-butyl phthalate -180.0;
		Di-n-octyl phthalate-35.0; 1,4
		Dioxane-0.36; Ethyl
		Acetate-1350.0; Ethyl Ether-315.0;
		Ethylbenzene-180.0;
		Flouranthene-45.0; Fluorene-45.0;
		1-Butanol-180.0; Methyl Ethyl
		Ketone-200.0; Methylene
		Chloride-0.45; Methyl Isobutyl
		Ketone-90.0; Naphthalene-45.0;
		Pyrene-45.0; Toluene-315.0;
		Xylenes-3150.0
		2. Waste Holding and
		Handling: Texas Eastman must
		store in accordance with its RCRA
		permit, or continue to dispose of as
		hazardous all FBI ash generated
		until the Initial and Subsequent
		Verification Testing described in
		Paragraph 4 and 5 below is completed
		and valid analyses demonstrate that
		all Verification Testing Conditions
		are satisfied. After completion of
		Initial and Subsequent Verification
		Testing, if the levels of
		constituents measured in the samples
		of the FBI ash do not exceed the
		levels set forth in Paragraph 1
		above, and written notification is
		given by EPA, then the waste is
		non-hazardous and may be managed and
		disposed of in accordance with all
		applicable solid waste regulations.
		3. Verification Testing
		Requirements: Sample collection
		and analyses, including quality
		control procedures, must be
		performed according to SW-846
		methodologies. If EPA judges the
		incineration process to be effective
		under the operating conditions used
		during the initial verification
		testing described in Paragraph 4
		below, Texas Eastman may replace the
		testing required in Paragraph 4 with
		the testing required in Paragraph 5
		below. Texas Eastman must, however,
		continue to test as specified in
		Paragraph 4 until notified by EPA in
		writing that testing in Paragraph 4
		may be replaced by the testing
		described in Paragraph 5.
		4. Initial Verification
		Testing: During the first 40
		operating days of the FBI
		incinerator after the final
		exclusion is granted, Texas Eastman
		must collect and analyze daily
		composites of the FBI ash. Daily
		composites must be composed of
		representative grab samples
		collected every 6 hours during each
		24-hour FBI operating cycle. The FBI
		ash must be analyzed, prior to
		disposal of the ash, for all
		constituents listed in Paragraph 1.
		Texas Eastman must report the opera-
		tional and analytical test data,
		including quality control
		information, obtained during this
		initial period no later than 90 days
		after receipt of the validated
		analytical results.

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		5. Subsequent Verification
		Testing: Following the
		completion of the Initial
		Verification Testing, Texas Eastman
		may request to monitor operating
		conditions and analyze samples
		representative of each quarter of
		operation during the first year of
		ash generation. The samples must
		represent the untreated ash
		generated over one quarter.
		Following written notification from
		EPA, Texas Eastman may begin the
		quarterly testing described in this
		Paragraph.
		6. Termination of Organic
		Testing: Texas Eastman must
		continue testing as required under
		Paragraph 5 for organic constituents
		specified in Paragraph 1 until the
		analyses submitted under Paragraph 5
		show a minimum of two consecutive
		quarterly samples below the
		delisting levels in Paragraph 1.
		Texas Eastman may then request that
		quarterly organic testing be
		terminated. After EPA notifies Texas
		Eastman in writing it may terminate
		quarterly organic testing.
		7. Annual Testing:
		Following termination of quarterly
		testing under either Paragraphs 5 or
		6, Texas Eastman must continue to
		test a representative composite
		sample for all constituents listed
		in Paragraph 1 (including organics)
		on an annual basis (no later than
		twelve months after the date that
		the final exclusion is effective).
		8. Changes in Operating
		Conditions: If Texas Eastman
		significantly changes the
		incineration process described in
		its petition or implements any new
		manufacturing or production
		process(es) which generate(s) the
		ash and which may or could affect
		the composition or type of waste
		generated established under
		Paragraph 3 (by illustration {but
		not limitation}, use of
		stabilization reagents or operating
		conditions of the fluidized bed
		incinerator), Texas Eastman must
		notify the EPA in writing and may no
		longer handle the wastes generated
		from the new process as non-haz-
		ardous until the wastes meet the
		delisting levels set in Paragraph 1
		and it has received written approval
		to do so from EPA.
		9. Data Submittals: The
		data obtained through Paragraph 3
		must be submitted to Mr. William
		Gallagher, Chief, Region 6 Delisting
		Program, U.S. EPA, 1445 Ross Ave,
		Dallas, Texas 75202-2733, Mail Code,
		(6PD-O) within the time period
		specified. Records of operating
		conditions and analytical data from
		Paragraph 3 must be compiled,
		summarized, and maintained on site
		for a minimum of five years. These
		records and data must be furnished
		upon request by EPA, or the State of
		Texas, and made available for
		inspection. Failure to submit the
		required data within the specified
		time period or maintain the required
		records on site for the specified
		time will be considered by EPA, at
		its discretion, sufficient basis to
		revoke the exclusion to the extent
		directed by EPA. All data must be

		accompanied by a signed copy of the
		following certification statement to
		attest to the truth and accuracy of
		the data submitted:
		Under civil and criminal penalty of
		law for the making or submission of
		false or fraudulent statements or
		representations (pursuant to the
		applicable provisions of the Federal
		Code, which include, but may not be
		limited to, 18 USC 1001 and 42 USC
		6928), I certify that the
		information contained in or
		accompanying this document is true,
		accurate and complete.
		As to the (those) identified
		section(s) of this document for
		which I cannot personally verify its
		(their) truth and accuracy, I
		certify as the company official
		having supervisory responsibility
		for the persons who, acting under my
		direct instructions, made the
		verification that this information
		is true, accurate and complete.
		In the event that any of this
		information is determined by EPA in
		its sole discretion to be false,
		inaccurate or incomplete, and upon
		conveyance of this fact to the
		company, I recognize and agree that
		this exclusion of waste will be void
		as if it never had effect or to the
		extent directed by EPA and that the
		company will be liable for any
		actions taken in contravention of
		the company's RCRA and CERCLA
		obligations premised upon the
		company's reliance on the void
		exclusion.
		10. Notification
		Requirements: Texas Eastman
		must provide a one-time written
		notification to any State Regulatory
		Agency to which or through which the
		delisted waste described above will
		be transported for disposal at least
		60 days prior to the commencement of
		such activities. Failure to provide
		such a notification will result in a
		violation of the delisting petition
		and a possible revocation of the
		decision.
United	Dearborn,	Chemically stabilized wastewater
Technolo-	Michigan	treatment sludge and soil (CSWWTSS)
gies Auto-		(EPA HW No. F006) that
motive, Inc		United Technologies Automotive (UTA)
		will generate during CERCLA removal
		of untreated sludge and soil (EPA
		Hazardous Waste No. F006) from six
		lagoons at the Highway 61 Industrial
		Site in Memphis, Tennessee. This is
		an upfront, one-time exclusion for
		approximately 20,500 cubic yards of
		waste that will be disposed of in a
		Subtitle D landfill after July 18,
		1996. UTA must demonstrate that the
		following conditions are met for the
		exclusion to be valid:
		(1) Verification Testing
		Requirements: Sample collection
		and analyses, including quality
		control procedures must be performed
		according to SW-846 methodologies.
		(A) Initial Verification
		Testing: UTA must collect and
		analyze a representative sample of
		every batch, for eight sequential
		batches of CSWWTSS generated during
		full-scale operation. A batch is the
		CSWWTSS generated during one run of
		the stabilization process. UTA must
		analyze for the constituents listed
		in Condition (3). A minimum of four

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		composite samples must be collected
		as representative of each batch. UTA
		must report operational and
		analytical test data, including
		quality control information, no
		later than 60 days after the
		generation of the first batch of
		CSWWTSS.
		(B) Subsequent Verification
		Testing: If the initial
		verification testing in Condition
		(1)(A) is successful, i.e.,
		delisting levels of condition (3)
		are met for all of the eight initial
		batches, UTA must test a minimum of
		5% of the remaining batches of
		CSWWTSS. UTA must collect and
		analyze at least one composite
		sample representative of that 5%.
		The composite must be made up of
		representative samples collected
		from each batch included in the 5%.
		UTA may, at its discretion, analyze
		composite samples gathered more fre-
		quently to demonstrate that smaller
		batches of waste are non-hazardous.
		(2) Waste Holding and
		Handling: UTA must store as
		hazardous all CSWWTSS generated
		until verification testing as
		specified in Condition (1)(A) and
		(1)(B), as appropriate, is completed
		and valid analyses demonstrate that
		Condition (3) is satisfied. If the
		levels of constituents measured in
		the samples of CSWWTSS do not
		exceed the levels set forth in Condition
		(3), then the CSWWTSS is
		non-hazardous and may be managed in
		accordance with all applicable sol-
		id waste regulations. If constituent
		levels in a sample exceed any of the
		delisting levels set forth in
		Condition (3), the batch of CSWWTSS
		generated during the time period
		corresponding to this sample must be
		retreated until it meets the
		delisting levels set forth in
		Condition (3), or managed and
		disposed of in accordance with
		Subtitle C of RCRA.
		(3) Delisting Levels: All
		leachable concentrations for these
		constituents must not exceed the
		following levels (ppm):
		Cadmium-0.40; cyanide-15.8;
		lead-1.18; and nickel-7.9. The
		leachable concentration of chromium
		must be less than 5.0 ppm. Metal
		concentrations in the waste leachate
		must be measured by the method
		specified in 40 CFR 261.24. The
		cyanide extraction must be conducted
		using deionized water. Total cyanide
		concentration in the leachate must
		be measured by Method 9010 or Method
		9012 of SW-846.
		(4) Changes in Operating
		Conditions: UTA must notify the
		Agency in writing when significant
		changes in the stabilization process
		are necessary (e.g., use of new
		stabilization reagents). Condition
		(1)(A) must be repeated for
		significant changes in operating
		conditions.
		(5) Data Submittals: UTA
		must notify EPA when the full-scale
		chemical stabilization process is
		scheduled to start operating. Data
		obtained in accordance with
		Conditions (1)(A) must be submitted
		to Jeaneane M. Gettle, Acting
		Chief, RCRA Compliance Section, Mail

		Code: 4WD-RCRA, US. EPA, Region 4,
		345 Courtland Street, N.E., Atlanta,
		Georgia. 30365. This notification is
		due no later than 60 days after the
		first batch of CSWWTSS is generated.
		Records of operating conditions and
		analytical data from Condition (1)
		must be compiled, summarized, and
		maintained by UTA for a minimum of
		five years, and must be furnished
		upon request by EPA or the State of
		Tennessee, and made available for
		inspection. Failure to submit the
		required data within the specified
		time period or maintain the required
		records for the specified time will
		be considered by EPA, at its
		discretion, sufficient basis to
		revoke the exclusion to the extent
		directed by EPA. All data must be
		accompanied by a signed copy of the
		following certification statement to
		attest to the truth and accuracy of
		the data submitted:
		Under civil and criminal penalty of
		law for the making or submission of
		false or fraudulent statements or
		representations (pursuant to the
		applicable provisions of the Federal
		Code, which include, but may not be
		limited to, 18 U.S.C. 1001 and 42
		U.S.C. 6928), I certify that the
		information contained or
		accompanying this document is true,
		accurate and complete.
		As to the (those) identified
		section(s) of this document for
		which I cannot personally verify its
		(their) truth and accuracy, I
		certify as the company official
		having supervisory responsibility for
		the persons who, acting under my
		direct instructions, made the
		verification that this information
		is true, accurate and complete.
		In the event that any of this
		information is determined by EPA in
		its sole discretion to be false,
		inaccurate or incomplete, and upon
		conveyance of this fact to the
		company, I recognize and agree that
		this exclusion of waste will be void
		as if it never had effect or to the
		extent directed by EPA and that the
		company will be liable for any
		actions taken in contravention of
		the company's RCRA and CERCLA
		obligations premised upon the
		company's void exclusion.
Universal Oil	Decatur,	Wastewater treatment sludges (EPA
Products	Alabama	Hazardous Waste No. F006) generated
		from electroplating operations and
		contained in two on-site lagoons on
		August 15, 1986. This is a one-time
		exclusion.
U.S. EPA	Jefferson,	One-time exclusion for scrubber water
Combustion	Arkansas	(EPA Hazardous Waste No. F020)
Research		generated in 1985 from the incinera-
Facility		tion of Vertac still bottoms. This
		exclusion was published on June 28,
		1989
U.S. Nameplate	Mount Vernon,	Retreated wastewater treatment sludges
Co, Inc.	Iowa	(EPA Hazardous Waste No. F006)
		previously generated from elec-
		troplating operations and currently
		contained in an on- site surface
		impoundment after September 28,
		1988. This is a one-time exclusion
		for the retreated wastes only. This
		exclusion does not relieve the waste
		unit from regulatory compliance
		under Subtitle C.
VAW of America	St. Augustine,	Wastewater treatment sludge filter
Incorporated	Florida	cake (EPA Hazardous Waste No. F019)

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		generated from the chemical conversion coating of aluminum. This exclusion was published on 2/1/89
Vermont American, Corp.	Newark, OH	Wastewater treatment sludge (EPA Hazardous Waste No. F006) generated from electroplating operations after November 27, 1985.
Waterloo Industries	Pocahontas, AR	Wastewater treatment sludges (EPA Hazardous Waste No. F006) generated from electroplating operations after dewatering and held on-site on July 17, 1986 and any such sludge generated (after dewatering) after July 17, 1986.
Watervliet Arsenal	Watervliet, NY	Wastewater treatment sludges (EPA Hazardous Waste No F006) generated from electroplating operations after July 17, 1986.
William L. Bonnell Co.	Newman, Georgia	Dewatered wastewater treatment sludges (EPA Hazardous Waste No. F019) generated from the chemical conversion coating of aluminum after November 14, 1986. This exclusion does not include sludges contained in Bonnell's on-site surface impoundments.
Windsor Plastics, Inc	Evansville, IN	Spent non-halogenated solvents and still bottoms (EPA Hazardous Waste No. F003) generated from the recovery of acetone after 11/1786
Table 2-Wastes Excluded From Specific Sources		
Facility	Address	Waste description
Akzo Chemicals Inc (formerly Stauffer Chemical Co)	Axis, AL	Brine purification muds generated from their chloralkali manufacturing operations (EPA Hazardous Waste No. K071) and disposed of in brine mud pond HWTF: 5 EP-201
American Cyanamid	Hannibal, Missouri	(a) Wastes excluded from non-specific sources. Wastewater and sludge (EPA Hazardous Waste No. K038) generated from the washing and stripping of phosphate production and contained in on-site lagoons on May 8, 1987, and such wastewater and sludge generated after 5/8/87
Amoco Oil Co	Wood River, IL	150 million gallons of DAF float from petroleum refining contained in four surge ponds after treatment with the Chemifix stabilization process. This waste contains EPA Hazardous Waste No. K048. This exclusion applies to the 150 million gallons of waste after chemical stabilization as long as the mixing ratios of the reagent with the waste are monitored continuously and do not vary outside of the limits presented in the demonstration samples; one grab sample is taken each hour from each treatment unit, composited, and EP toxicity tests performed on each sample. If the levels of lead or total chromium exceed 0.5 ppm in the EP extract, then the waste that was processed during the compositing period is considered hazardous; the treatment

		residue shall be pumped into bermed cells to ensure that the waste is identifiable in the event that removal is necessary.
Bekaert Steel Corporation	Rogers, Arkansas	Wastewater treatment sludge (EPA Hazardous Waste No. F006) generated from electroplating operations (at a maximum annual rate of 1250 cubic yards to be measured on a calendar year basis) after [insert publication date of the final rule]. In order to confirm that the characteristics of the waste do not change significantly, the facility must, on an annual basis, before July 1 of each year, analyze a representative composite sample for the constituents listed in 261.24 as well as antimony, copper, nickel, and zinc using the method specified therein. The annual analytical results, including quality control information, must be compiled, certified according to 260.22(i)(12) of this chapter, maintained on site for a minimum of five years, and made available for inspection upon request of any employee or representative of EPA or the State of Arkansas. Failure to maintain the required documents on site will be considered by EPA, at its discretion, sufficient basis to revoke the exclusion to the extent directed by EPA.
		Notification Requirements: Bekaert Steel Corporation must provide a one -time written notification to any State Regulatory Agency to which or through which the delisted waste described above will be transported for disposal at least 60 days prior to the commencement of such activities. Failure to provide such a notification will result in a violation of the delisting petition and a possible revocation of the decision.
Bethlehem Steel Corp.	Steelton, PA	Uncured and cured chemically stabilized electric arc furnace dust/sludge (CSEAFD) treatment residue (K061) generated from the primary production of steel after May 22, 1989. This exclusion is conditioned upon the

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		data obtained from
		Bethlehem's full-scale
		CSEAFD treatment
		facility because
		Bethlehem's original
		data were obtained from
		a laboratory-scale
		CSEAFD treatment
		process. To ensure that
		hazardous constituents
		are not present in the
		waste at levels of
		regulatory concern once
		the full-scale treatment
		facility is in
		operation, Bethlehem
		must implement a testing
		program for the
		petitioned waste. This
		testing program must
		meet the following
		conditions for the
		exclusion to be valid:
		(1) Testing:
		(A) Initial
		Testing: During the
		first four weeks of
		operation of the
		full-scale treatment
		system, Bethlehem must
		collect representative
		grab samples of each
		treated batch of the
		CSEAFD and composite the
		grab samples daily. The
		daily composites, prior
		to disposal, must be
		analyzed for the EP
		leachate concentrations
		of all the EP toxic
		metals, nickel and
		cyanide (using dis-
		tilled water in the
		cyanide extractions),
		and the total
		constituent
		concentrations of reac-
		tive sulfide and
		reactive cyanide.
		Analyses must be
		performed according to
		SW-846 methodologies.
		Bethlehem must report
		the analytical test data
		obtained during this
		initial period no later
		than 90 days after the
		treatment of the first
		full-scale batch.
		(B) Subsequent
		Testing: Bethlehem
		must collect
		representative grab
		samples from every
		treated batch of CSEAFD
		generated daily and
		composite all of the
		grab samples to produce
		a weekly composite
		sample. Bethlehem then
		must analyze each weekly
		composite sample for the
		EP leachate
		concentrations of all
		the EP toxic metals and
		nickel. Analyses must be
		performed according to
		SW-846 methodologies.
		The analytical data,
		including all quality
		control information,
		must be compiled and
		maintained on site for a
		minimum of three years.

		These data must be
		furnished upon request
		and made available for
		inspection by any
		employee or
		representative of EPA or
		the State of
		Pennsylvania.
		(2) Delisting
		Levels: If the EP
		extract concentrations
		resulting from the
		testing in condition
		(1)(A) or (1)(B) for
		chromium, lead, arsenic,
		or silver exceed 0.315
		mg/L, for barium exceeds
		6.3 mg/l; for cadmium or
		selenium exceed 0.063
		mg/l; for mercury
		exceeds 0.0126 mg/l; for
		nickel exceeds 3.15
		mg/l; or for cyanide
		exceeds 4.42 mg/L, or
		total reactive cyanide
		or total reactive
		sulfide levels exceed
		250 mg/kg and 500 mg/kg,
		respectively, the waste
		must either be
		re-treated or managed
		and disposed in
		accordance with subtitle
		C of RCRA.
		(3) Data
		submittals: Within
		one week of system
		start-up, Bethlehem must
		notify the Section
		Chief, Variances Section
		(see address below) when
		their full-scale
		stabilization system is
		on-line and waste treat-
		ment has begun. All data
		obtained through the
		initial testing
		condition (1)(A), must
		be submitted to the
		Section Chief, Variances
		Section, PSPD/OSW,
		(OS-343), U.S. EPA, 401
		M Street, S.W.,
		Washington, DC 20460
		within the time period
		specified in condition
		(1)(A). At the Section
		Chief's request, Beth-
		lehem must submit
		analytical data obtained
		through condition (1)(B)
		to the above address,
		within the time period
		specified by the Section
		Chief. Failure to submit
		the required data
		obtained from either
		condition (1)(A) or
		(1)(B) within the
		specified time periods
		will be considered by
		the Agency sufficient
		basis to revoke
		Bethlehem's exclusion to
		the extent directed by
		EPA. All data must be
		accompanied by the
		following certifica-
		tion statement:
		Under civil and criminal
		penalty of law for the
		making or submission of
		false or fraudulent
		statements or

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		representations
		(pursuant to the
		applicable provisions of
		the Federal Code which
		include, but may not be
		limited to, 18 U.S.C.
		6928), I certify that
		the information
		contained in or
		accompanying this
		document is true,
		accurate and complete.
		As to the (those)
		identified section(s) of
		this document for which
		I cannot personally ver-
		ify its (their) truth
		and accuracy, I certify
		as the company official
		having supervisory re-
		sponsibility for the
		persons who, acting un-
		der my direct
		instructions, made the
		verification that this
		information is true,
		accurate and complete.
		In the event that any of
		this information is
		determined by EPA in its
		sole discretion to be
		false, inaccurate or
		incomplete, and upon
		conveyance of this fact
		to the company, I
		recognize and agree that
		this exclusion of wastes
		will be void as if it
		never had effect or to
		the extent directed by
		EPA and that the company
		will be liable for any
		actions taken in
		contravention of the
		company's RCRA and
		CERCLA obligations
		premised upon the
		company's reliance on
		the void exclusion.
Bethlehem	Johnstown,	Uncured and cured
Steel Corp.	PA	chemically stabilized
		electric arc furnace
		dust/sludge (CSEAFD)
		treatment residue (K061)
		generated from the
		primary production of
		steel after May 22,
		1989. This exclusion is
		conditioned upon the
		data obtained from
		Bethlehem's full-scale
		CSEAFD treatment
		facility because
		Bethlehem's original
		data were obtained from
		a laboratory-scale CSEAFD
		treatment process. To
		ensure that hazardous
		constituents are not
		present in the waste at
		levels of regulatory
		concern once the
		full-scale treatment
		facility is in
		operation, Bethlehem
		must implement a testing
		program for the
		petitioned waste. This
		testing program must
		meet the following
		conditions for the
		exclusion to be valid:
		(1) Testing:
		(A) Initial

		Testing: During the
		first four weeks of
		operation of the
		full-scale treatment
		system, Bethlehem must
		collect representative
		grab samples of each
		treated batch of the
		CSEAFD and composite the
		grab samples daily. The
		daily composites, prior
		to disposal, must be
		analyzed for the EP
		leachate concentrations
		of all the EP toxic
		metals, nickel and
		cyanide (using dis-
		tilled water in the
		cyanide extractions),
		and the total
		constituent
		concentrations of reac-
		tive sulfide and
		reactive cyanide.
		Analyses must be
		performed according to
		SW-846 methodologies.
		Bethlehem must report
		the analytical test data
		obtained during this
		initial period no later
		than 90 days after the
		treatment of the first
		full-scale batch.
		(B) Subsequent
		Testing: Bethlehem
		must collect
		representative grab
		samples from every
		treated batch of CSEAFD
		generated daily and
		composite all of the
		grab samples to produce
		a weekly composite
		sample. Bethlehem then
		must analyze each weekly
		composite sample for the
		EP leachate
		concentrations of all
		the EP toxic metals and
		nickel. Analyses must be
		performed according to
		SW-846 methodologies.
		The analytical data,
		including all quality
		control information,
		must be compiled and
		maintained on site for a
		minimum of three years.
		These data must be
		furnished upon request
		and made available for
		inspection by any
		employee or
		representative of EPA or
		the State of
		Pennsylvania.
		(2) Delisting
		Levels: If the EP
		extract concentrations
		resulting from the
		testing in condition
		(1)(A) or (1)(B) for
		chromium, lead, arsenic,
		or silver exceed 0.315
		mg/L, for barium exceeds
		6.3 mg/l; for cadmium or
		selenium exceed 0.063
		mg/l; for mercury
		exceeds 0.0126 mg/l; for
		nickel exceeds 3.15
		mg/l; or for cyanide
		exceeds 4.42 mg/L, or
		total reactive cyanide

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		or total reactive
		sulfide levels exceed
		250 mg/kg and 500 mg/kg,
		respectively, the waste
		must either be
		re-treated or managed
		and disposed in
		accordance with subtitle
		C of RCRA.
		(3) Data
		submittals: Within
		one week of system
		start-up, Bethlehem must
		notify the Section
		Chief, Variances Section
		(see address below) when
		their full-scale
		stabilization system is
		on-line and waste treat-
		ment has begun. All data
		obtained through the
		initial testing
		condition (1)(A), must
		be submitted to the
		Section Chief, Variances
		Section, PSPD/OSW,
		(OS-343), U.S. EPA, 401
		M Street, SW.,
		Washington, DC 20406
		within the time period
		specified in condition
		(1)(A). At the Section
		Chief's request, Beth-
		lehem must submit
		analytical data obtained
		through condition (1)(B)
		to the above address,
		within the time period
		specified by the Section
		Chief. Failure to submit
		the required data
		obtained from either
		condition (1)(A) or
		(1)(B) within the
		specified time periods
		will be considered by
		the Agency sufficient
		basis to revoke
		Bethlehem's exclusion to
		the extent directed by
		EPA. All data must be
		accompanied by the
		following certifica-
		tion statement:
		Under civil and criminal
		penalty of law for the
		making or submission of
		false or fraudulent
		statements or
		representations
		(pursuant to the
		applicable provisions of
		the Federal Code which
		include, but may not be
		limited to, 18 U.S.C.
		6928), I certify that
		the information
		contained in or
		accompanying this
		document is true,
		accurate and complete.
		As to the (those)
		identified section(s) of
		this document for which
		I cannot personally ver-
		ify its (their) truth
		and accuracy, I certify
		as the company official
		having supervisory re-
		sponsibility for the
		persons who, acting un-
		der my direct
		instructions, made the
		verification that this

		information is true,
		accurate and complete.
		In the event that any of
		this information is
		determined by EPA in its
		sole discretion to be
		false, inaccurate or
		incomplete, and upon
		conveyance of this fact
		to the company, I
		recognize and agree that
		this exclusion of wastes
		will be void as if it
		never had effect or to
		the extent directed by
		EPA and that the company
		will be liable for any
		actions taken in
		contravention of the
		company's RCRA and
		CERCLA obligations
		premised upon the
		company's reliance on
		the void exclusion.
Bethlehem	Lackawanna,	Ammonia still lime sludge
Steel	New York	(EPA Hazardous Waste No.
Corporation		K060) and other solid
		waste generated from
		primary metal-making and
		coking operations. This
		is a one-time exclusion
		for 118,000 cubic yards
		of waste contained in
		the on-site landfill
		referred to as HWM-2.
		This exclusion was
		published on April 24, 1996
BF Goodrich	Calvert City,	Brine purification muds
Intermediates	Kentucky	and saturator in-
Company,		solubles (EPA Hazardous
Inc.		Waste No. K071) after
		August 18, 1989. This
		exclusion is conditional
		upon the collection and
		submission of data
		obtained from BFG's
		full-scale treatment
		system because BFG's
		original data was based
		on data presented by an-
		other petitioner using
		an identical treatment
		process. To ensure that
		hazardous constituents
		are not present in the
		waste at levels of
		regulatory concern once
		the full-scale treatment
		facility is in
		operation, BFG must
		implement a testing
		program. All sampling
		and analyses (including
		quality control pro-
		cedures) must be
		performed according to
		SW-846 procedures. This
		testing program must
		meet the following
		conditions for the
		exclusion to be valid:
		(1) Initial Testing:
		During the first four
		weeks of full-scale
		operation, BFG must do
		the following:
		(A) Collect representative
		grab samples from every
		batch of the treated
		mercury brine
		purification muds and
		treated saturator in-
		solubles on a daily
		basis and composite the

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	grab samples to produce
	two separate daily
	composite samples (one
	of the treated mercury
	brine purification muds
	and one of the treated
	saturator insolubles).
	Prior to disposal of the
	treated batches, two
	daily composite samples
	must be analyzed for EP
	leachate concentration
	of mercury. BFG must
	report the analytical
	test data, including all
	quality control data,
	within 90 days after the
	treatment of the first
	full-scale batch.
	(B) Collect representative
	grab samples from every
	batch of the treated
	mercury brine
	purification muds and
	treated saturator in-
	solubles on a daily
	basis and composite the
	grab samples to produce
	two separate weekly
	composite samples (one
	of the treated mercury
	brine muds and one of
	the treated saturator
	insolubles). Prior to
	disposal of the treated
	batches, two weekly
	composite samples must
	be analyzed for the EP
	leachate concentrations
	of all the EP toxic
	metals (except mercury),
	nickel, and cyanide
	(using distilled water
	in the cyanide
	extractions), and the
	total constituent con-
	centrations of reactive
	sulfide and reactive
	cyanide. BFG must report
	the analytical test
	data, including all
	quality control data,
	obtained during this
	initial period no later
	than 90 days after the
	treatment of the first
	full-scale batch.
	(2) Subsequent Testing:
	After the first four
	weeks of full-scale
	operation, BFG must do
	the following:
	(A) Continue to sample and
	test as described in
	condition (1)(A). BFG
	must compile and store
	on-site for a minimum of
	three years all
	analytical data and
	quality control data.
	These data must be
	furnished upon request
	and made available for
	inspection by any
	employee or
	representative of EPA or
	the State of Kentucky.
	(B) Continue to sample and
	test as described in
	condition (1)(B). BFG
	must compile and store
	on-site for a minimum of
	three years all
	analytical data and

	quality control data.
	These data must be
	furnished upon request
	and made available for
	inspection by any
	employee or
	representative of EPA or
	the State of Kentucky.
	These testing require-
	ments shall be
	terminated by EPA when
	the results of four
	consecutive weekly
	composite samples of
	both the treated mercury
	brine muds and treated
	saturator insolubles,
	obtained from either the
	initial testing or
	subsequent testing, show
	the maximum allowable
	levels in condition (3)
	are not exceeded and the
	Section Chief, Variances
	Section, notifies BFG
	that the requirements of
	this condition have been
	lifted.
	(3) If, under condition
	(1) or (2), the EP
	leachate concentrations
	for chromium, lead, ar-
	senic, or silver exceed
	0.316 mg/l; for barium
	exceeds 6.31 mg/l; for
	cadmium or selenium
	exceed 0.063 mg/l; for
	mercury exceeds 0.0126
	mg/l, for nickel exceeds
	3.16 mg/l; for cyanide
	exceeds 4.42 mg/l; or
	for total reactive
	cyanide or total
	reactive sulfide levels
	exceed 250 mg/kg and 500
	mg/kg, respectively, the
	waste must either be
	retreated until it meets
	these levels or managed
	and disposed of in
	accordance with subtitle
	C of RCRA.
	(4) Within one week of
	system start-up, BFG
	must notify the Section
	Chief, Variances Section
	(see address below) when
	the full-scale system is
	on-line and waste
	treatment has begun. All
	data obtained through
	condition (1) must be
	submitted to the Section
	Chief, Variances
	Section, PSPD/OSW (OS-
	343), U.S. EPA, 401 M
	Street, SW., Wash-
	ington, DC 20460 within
	the time period
	specified in condition
	(1). At the Section
	Chief's request, BFG
	must submit any other
	analytical data obtained
	through condition (2) to
	the above address,
	within the time period
	specified by the Section
	Chief. Failure to submit
	the required data will
	be considered by the
	Agency sufficient basis
	to revoke BFG's
	exclusion to the extent

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		directed by EPA. All
		data must be accompanied
		by the following
		certification statement:
		Under civil and criminal
		penalty of law for the
		making or submission of
		false or fraudulent
		statements or
		representations
		(pursuant to the
		applicable provisions of
		the Federal Code which
		include, but may not be
		limited to, 18 U.S.C.
		6928), I certify that
		the information
		contained in or
		accompanying this
		document is true,
		accurate and complete.
		As to the (those)
		identified section(s) of
		this document for which
		I cannot personally ver-
		ify its (their) truth
		and accuracy, I certify
		as the company official
		having supervisory re-
		sponsibility for the
		persons who, acting un-
		der my direct
		instructions, made the
		verification that this
		information is true,
		accurate and complete.
		In the event that any of
		this information is
		determined by EPA in its
		sole discretion to be
		false, inaccurate or
		incomplete, and upon
		conveyance of this fact
		to the company, I
		recognize and agree that
		this exclusion of wastes
		will be void as if it
		never had effect or to
		the extent directed by
		EPA and that the company
		will be liable for any
		actions taken in
		contravention of the
		company's RCRA and
		CERCLA obligations
		premised upon the
		company's reliance on
		the void exclusion.
CF & I Steel	Pueblo,	Fully-cured chemically
Corporation	Colorado	stabilized electric arc
		furnace dust/sludge
		(CSEAFD) treatment
		residue (EPA Hazardous
		Waste No. K061)
		generated from the
		primary production of
		steel after May 9, 1989.
		This exclusion is
		conditioned upon the
		data obtained from
		CF & I's full-scale
		CSEAFD treatment
		facility because
		CF & I's original data
		was obtained from a
		laboratory-scale CSEAFD
		treatment process. To
		ensure that hazardous
		constituents are not
		present in the waste at
		levels of regulatory
		concern once the
		full-scale treatment
		facility is in

		operation, CF & I must
		implement a testing
		program for the peti-
		tioned waste. This
		testing program must
		meet the following
		conditions for the
		exclusion to be valid:
		(1) Testing:
		(A) Initial
		Testing: During the
		first four weeks of
		operation of the
		full-scale treatment
		system, CF & I must
		collect representative
		grab samples of each
		treated batch of the
		CSEAFD and composite the
		grab samples daily. The
		daily composites, prior
		to disposal, must be
		analyzed for the EP
		leachate concentrations
		of all the EP toxic
		metals, nickel, and
		cyanide (using dis-
		tilled water in the
		cyanide extractions),
		and the total
		constituent
		concentrations of reac-
		tive sulfide and
		reactive cyanide.
		Analyses must be
		performed according to
		SW-846 methodologies.
		CF & I must report the
		analytical test data
		obtained during this
		initial period no later
		than 90 days after the
		treatment of the first
		full-scale batch.
		(B) Subsequent
		Testing: CF & I
		must collect
		representative grab
		samples from every
		treated batch of CSEAFD
		generated daily and
		composite all of the
		grab samples to produce
		a weekly composite
		sample. CF & I then
		must analyze each weekly
		composite sample for the
		EP leachate concen-
		trations of all of the
		EP toxic metals and
		nickel. Analyses must be
		performed according to
		SW-846 methodologies.
		The analytical data,
		including all quality
		control information,
		must be compiled and
		maintained on site for a
		minimum of three years.
		These data must be
		furnished upon request
		and made available for
		inspection by any
		employee or
		representative of EPA or
		the State of Colorado.
		(2) Delisting
		levels: If the EP
		extract concentrations
		determined in conditions
		(1)(A) or (1)(B) for
		chromium, lead, arsenic,
		or silver exceed 0.315
		mg/l; for barium ex-

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		ceeds 6.3 mg/l; for
		cadmium or selenium
		exceed 0.063 mg/l; for
		mercury exceeds 0.0126
		mg/l; for nickel exceeds
		3.15 mg/l; or for
		cyanide exceeds 4.42
		mg/l, or total reactive
		cyanide or total
		reactive sulfide levels
		exceed 250 mg/kg and 500
		mg/kg, respectively, the
		waste must either be re-
		treated or managed and
		disposed in accordance
		with Subtitle C of RCRA.
		(3) Data
		submittals: Within
		one week of system
		start-up, CF & I must
		notify the Section
		Chief, Variances Section
		(see address below) when
		their full-scale
		stabilization system is
		on-line and waste
		treatment has begun. All
		data obtained through
		the initial testing
		condition (1)(A), must
		be submitted to the
		Section Chief, Variances
		Section, PSPD/OSW,
		(OS-343), U.S. EPA, 401
		M Street, SW.,
		Washington, DC 20460
		within the time period
		specified in condition
		(1)(A). At the Section
		Chief's request, CF & I
		must submit analytical
		data obtained through
		condition (1)(B) to the
		above address, within
		the time period
		specified by the Section
		Chief. Failure to submit
		the required data
		obtained from either
		condition (1)(A) or
		(1)(B) within the
		specified time periods
		will be considered by
		the Agency sufficient
		basis to revoke
		CF & I's exclusion to
		the extent directed by
		EPA. All data must be
		accompanied by the
		following certification
		statement: Under civil
		and criminal penalty of
		law for the making of
		submission of false or
		fraudulent statements or
		representations
		(pursuant to the
		applicable provisions of
		the Federal Code which
		include, but may not be
		limited to, 18 U.S.C.
		6928), I certify that
		the information
		contained in or
		accompanying this
		document is true,
		accurate and complete.
		As to the (those)
		identified section(s) of
		this document for which
		I cannot personally
		verify its (their) truth
		and accuracy, I certify
		as the company official

		having supervisory
		responsibility for the
		persons who, acting
		under my direct
		instructions, made the
		verification that this
		information is true,
		accurate and complete.
		In the event that any of
		this information is
		determined by EPA in its
		sole discretion to be
		false, inaccurate or
		incomplete, and upon
		conveyance of this fact
		to the company, I
		recognize and agree that
		this exclusion of wastes
		will be void as if it
		never had effect or to
		the extent directed by
		EPA and that the company
		will be liable for any
		actions taken in
		contravention of the
		company's RCRA and
		CERCLA obligations
		premised upon the
		company's reliance on
		the void exclusion.
Conversion	Horsham,	Chemically Stabilized
Systems,	Pennsylvania	Electric Arc Furnace
Inc		Dust (CSEAFD) that is
		generated by Con-
		version Systems, Inc.
		(CSI) (using the Super
		Detox™
		treatment process as
		modified by CSI to treat
		EAFF (EPA Hazardous
		Waste No. K061)) at the
		following sites and that
		is disposed of in
		Subtitle D landfills:
		Northwestern Steel,
		Sterling, Illinois after
		June 13, 1995.
		CSI must implement a
		testing program for each
		site that meets the
		following conditions for
		the exclusion to be
		valid:
		(1) Verification
		Testing Requirements:
		Sample collection
		and analyses, includ-
		ing quality control
		procedures, must be per-
		formed according to
		SW-846 methodologies.
		(A) Initial
		Verification
		Testing: During the
		first 20 operating days
		of full-scale op-
		eration of a newly
		constructed Super Detox
		™ treatment
		facility, CSI must
		analyze a minimum of
		four (4) composite
		samples of CSEAFD
		representative of the
		full 20-day period.
		Composites must be
		comprised of
		representative samples
		collected from every
		batch generated. The
		CSEAFD samples must be
		analyzed for the
		constituents listed in
		Condition (3). CSI must

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	report the operational
	and analytical test
	data, including quality
	control information,
	obtained during this
	initial period no later
	than 60 days after the
	generation of the first
	batch of CSEAFD.
	(B) Addition of New
	Super Detox
	TM
	Treatment
	Facilities to
	Exclusion: If the
	Agency's review of the
	data obtained during
	initial verification
	testing indicates that
	the CSEAFD generated by
	a specific Super
	DetoxTM
	treatment facility
	consistently meets the
	delisting levels
	specified in Condition
	(3), the Agency will
	publish a notice adding
	to this exclusion the
	location of the new
	Super Detox
	TM treatment
	facility and the name of
	the steel mill
	contracting CSI's ser-
	vices. If the Agency's
	review of the data
	obtained during initial
	verification testing in-
	dicates that the CSEAFD
	generated by a specific
	Super
	DetoxTM
	treatment facility fails
	to consistently meet the
	conditions of the
	exclusion, the Agency
	will not publish the
	notice adding the new
	facility.
	(C) Subsequent
	Verification
	Testing: For the
	Sterling, Illinois
	facility and any new
	facility subsequently
	added to CSI's condi-
	tional multiple-site
	exclusion, CSI must col-
	lect and analyze at
	least one composite
	sample of CSEAFD each
	month. The composite
	samples must be composed
	of representative
	samples collected from
	all batches treated in
	each month. These
	monthly representative
	samples must be
	analyzed, prior to the
	disposal of the CSEAFD,
	for the constituents
	listed in Condition (3).
	CSI may, at its
	discretion, analyze
	composite samples
	gathered more fre-
	quently to demonstrate
	that smaller batches of
	waste are nonhazardous.
	(2) Waste Holding
	and Handling: CSI
	must store as hazardous

	all CSEAFD generated
	until verification
	testing as specified in
	Conditions (1)(A) and
	(1)(C), as appropri-
	ate, is completed and
	valid analyses dem-
	onstrate that Condition
	(3) is satisfied. If the
	levels of constituents
	measured in the sam-
	ples of CSEAFD do not
	exceed the levels set
	forth in Condition (3),
	then the CSEAFD is
	non-hazardous and may be
	disposed of in Subtitle
	D landfills. If
	constituent levels in a
	sample exceed any of the
	delisting levels set in
	Condition (3), the
	CSEAFD generated during
	the time period
	corresponding to this
	sample must be retreated
	until it meets these
	levels, or managed and
	disposed of in
	accordance with Subtitle
	C of RCRA. CSEAFD
	generated by a new CSI
	treatment facility must
	be managed as a
	hazardous waste prior to
	the addition of the name
	and location of the
	facility to the
	exclusion. After
	addition of the new
	facility to the
	exclusion, CSEAFD
	generated during the
	verification testing in
	Condition (1)(A) is also
	non-hazardous, if the
	delisting levels in
	Condition (3) are
	satisfied.
	(3) Delisting
	Levels: All
	leachable concentrations
	for those metals must
	not exceed the following
	levels (ppm): Antimony
	-0.06; arsenic-0.50;
	barium-7.6; beryllium-
	-0.010; cadmium-0.050;
	chromium-0.33;
	lead-0.15;
	mercury-0.009;
	nickel-1;
	selenium-0.16;
	silver-0.30;
	thallium-0.020;
	vanadium-2; and zinc-70.
	Metal concentrations
	must be measured in the
	waste leachate by the
	method specified in 40
	CFR 261.24.
	(4) Changes in
	Operating
	Conditions: After
	initiating subsequent
	testing as described in
	Condition (1)(C), if CSI
	significantly changes
	the stabilization
	process established
	under Condition (1)
	(e.g., use of
	new stabilization
	reagents), CSI must

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		notify the Agency in
		writing. After written
		approval by EPA, CSI may
		handle CSEAFD wastes
		generated from the new
		process as
		non-hazardous, if the
		wastes meet the de-
		listing levels set in
		Condition (3).
		(5) Data
		Submittals: At
		least one month prior to
		operation of a new Super
		DetoxTM
		treatment facility, CSI
		must notify, in writing,
		the Chief of the Waste
		Identification Branch
		(see address below) when
		the Super
		DetoxTM
		treatment facility is
		scheduled to be on-line.
		The data obtained
		through Condition (1)(A)
		must be submitted to the
		Branch Chief of the
		Waste Identification
		Branch, OSW (Mail Code
		5304), U.S. EPA, 401 M
		Street, SW, Washington,
		DC 20460 within the time
		period specified.
		Records of operating
		conditions and
		analytical data from
		Condition (1) must be
		compiled, summarized,
		and maintained on site
		for a minimum of five
		years. These records and
		data must be furnished
		upon request by EPA, or
		the State in which the
		CSI facility is located,
		and made available for
		inspection. Failure to
		submit the required data
		within the specified
		time period or maintain
		the required records on
		site for the specified
		time will be considered
		by EPA, at its
		discretion, sufficient
		basis to revoke the
		exclusion to the extent
		directed by EPA. All
		data must be accompanied
		by a signed copy of the
		following certification
		statement to attest to
		the truth and accuracy
		of the data submitted:
		Under civil and criminal
		penalty of law for the
		making or submission of
		false or fraudulent
		statements or
		representations
		(pursuant to the
		applicable provisions of
		the Federal Code, which
		include, but may not be
		limited to, 18 U.S.C.
		1001 and 42 U.S.C.
		6928), I certify that
		the information
		contained in or
		accompanying this
		document is true, accu-
		rate and complete.
		As to the (those)

		identified section(s) of
		this document for which
		I cannot personally ver-
		ify its (their) truth
		and accuracy, I certify
		as the company official
		having supervisory re-
		sponsibility for the
		persons who, acting un-
		der my direct
		instructions, made the
		verification that this
		information is true,
		accurate and complete.
		In the event that any of
		this information is
		determined by EPA in its
		sole discretion to be
		false, inaccurate or
		incomplete, and upon
		conveyance of this fact
		to the company, I
		recognize and agree that
		this exclusion of waste
		will be void as if it
		never had effect or to
		the extent directed by
		EPA and that the company
		will be liable for any
		actions taken in
		contravention of the
		company's RCRA and
		CERCLA obligations
		premised upon the
		company's reliance on
		the void exclusion.
DOE-RL	Richland,	Effluents (EPA Hazardous
	Washington	Waste Nos. F001, F002,
		F003, F004, F005, and
		F039 derived from F001
		through F005) generated
		from the 200 Area
		Effluent Treatment
		Facility (ETF) located
		at the Hanford site (at
		a maximum generation
		rate of 19 million
		gallons per year) after
		June 13, 1995. To ensure
		that hazardous
		constituents are not
		present in the wastes at
		levels of regulatory
		concern while the
		treatment facility is in
		operation, DOE must
		implement a testing
		program. This testing
		program must meet the
		following conditions for
		the exclusion to be
		valid:
		(1) Testing:
		Sample collection and
		analyses (including
		quality control (QC)
		procedures) must be
		performed according to
		SW-846 (or other
		EPA-approved) methodol-
		ogies. If EPA judges the
		treatment process to be
		effective under the
		operating conditions
		used during the initial
		verification testing,
		DOE may replace the
		testing required in
		Condition (1)(A) with
		the testing required in
		Condition (1)(B). DOE
		must continue to test as
		specified in Condition
		(1)(A) until notified by

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	EPA in writing that
	testing in Condition (1)
	(A) may be replaced by
	Condition (1)(B).
	(A) Initial
	Verification
	Testing: During the
	period required to fill
	the first three veri-
	fication tanks (each
	designed to hold ap-
	proximately 650,000
	gallons) with effluents
	generated from an
	on-line, full-scale
	Effluent Treatment
	Facility (ETF), DOE must
	monitor the range of
	typical operating con-
	ditions for the ETF. DOE
	must collect a rep-
	resentative sample from
	each of the first three
	verification tanks
	filled with ETF efflu-
	ents. The samples must
	be analyzed, prior to
	disposal of ETF
	effluents, for all
	constituents listed in
	Condition (3). DOE must
	report the operational
	and analytical test
	data, including quality
	control information,
	obtained during this
	initial period no later
	than 90 days after the
	first verification tank
	is filled with ETF
	effluents.
	(B) Subsequent
	Verification
	Testing: Following
	notification by EPA, DOE
	may substitute the
	testing conditions in
	this condition for
	(1)(A). DOE must
	continue to monitor
	operating conditions,
	and collect and analyze
	representative samples
	from every tenth
	verification tank filled
	with ETF effluents.
	These representative
	samples must be
	analyzed, prior to
	disposal of ETF efflu-
	ents, for all
	constituents listed in
	Condition (3). If all
	constituent levels in a
	sample do not meet the
	delisting levels
	specified in Condition
	(3), DOE must analyze
	representative samples
	from the following two
	verification tanks
	generated prior to
	disposal. DOE may also
	collect and analyze
	representative samples
	more frequently.
	(2) Waste Holding
	and Handling: DOE
	must store as hazardous
	all ETF effluents
	generated during
	verification testing (as
	specified in Conditions
	(1)(A) and (1)(B)), that

	is until valid analyses
	demonstrate that
	Condition (3) is
	satisfied. If the levels
	of hazardous
	constituents in the
	samples of ETF effluents
	are equal to or below
	all of the levels set
	forth in Condition (3),
	then the ETF effluents
	are not hazardous and
	may be managed and
	disposed of in
	accordance with all
	applicable solid waste
	regulations. If
	hazardous constituent
	levels in any repre-
	sentative sample
	collected from a
	verification tank exceed
	any of the delisting
	levels set in Condition
	(3), the ETF effluents
	in that verification
	tank must be re-treated
	until the ETF effluents
	meet these levels.
	Following re-treatment,
	DOE must repeat analyses
	in Condition (3) prior
	to disposal.
	(3) Delisting
	Levels: All total
	constituent
	concentrations in the
	waste samples must be
	measured using the
	appropriate methods
	specified in Test
	Methods for Evaluating
	Solid Wastes:
	Physical/Chemical
	Methods, U.S. EPA
	Publication SW-846 (or
	other EPA-approved
	methods). All total
	constituent
	concentrations must be
	equal to or less than
	the following levels
	(ppm):
	Inorganic Constituents
	Ammonium-10.0
	Antimony-0.06
	Arsenic-0.5
	Barium-20.0
	Beryllium-0.04
	Cadmium-0.05
	Chromium-1.0
	Cyanide-2.0
	Fluoride-40.0
	Lead-0.15
	Mercury-0.02
	Nickel-1.0
	Selenium-0.5
	Silver-2.0
	Vanadium-2.0
	Zinc-100.0
	Organic Constituents
	Acetone-40.0
	Benzene-0.05
	Benzyl alcohol-100.0
	1-Butyl alcohol-40.0
	Carbon tetrachloride-0.05
	Chlorobenzene-1.0
	Chloroform-0.1
	Cresol-20.0
	1,4-Dichlorobenzene-0.75
	1,2-Dichloroethane-0.05
	1,1-Dichloroethylene-0.07
	Di-n-octyl phthalate-7.0
	Hexachloroethane-0.06

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		Methyl ethyl ketone-200.0
		Methyl isobutyl
		ketone-30.0
		Naphthalene-10.0
		Tetrachloroethylene-0.05
		Toluene-10.0
		Tributyl phosphate-0.2
		1,1,1-Trichloroethane-2.0
		1,1,2-Trichloroethane-
		0.05
		Trichloroethylene-0.05
		Vinyl Chloride-0.02
		(4) Changes in
		Operating
		Conditions: After
		completing the initial
		verification testing in
		Condition (1)(A), if DOE
		significantly changes
		the operating conditions
		established in Condition
		(1), DOE must notify the
		Agency in writing. After
		written approval by EPA,
		DOE must re-institute
		the testing required in
		Condition (1)(A). DOE
		must report the
		operations and test
		data, required by
		Condition (1)(A),
		including quality
		control data, obtained
		during this period no
		later than 60 days after
		the changes take place.
		Following written
		notification by EPA, DOE
		may replace testing
		Condition (1)(A) with
		(1)(B). DOE must fulfill
		all other requirements
		in Condition (1), as
		appropriate.
		(5) Data
		Submittals: At
		least two weeks prior to
		system start-up, DOE
		must notify, in writing,
		the Chief of the Waste
		Identification Branch
		(see address below) when
		the Effluent Treatment
		Process will be on-line
		and waste treatment will
		begin. The data obtained
		through Condition (1)(A)
		must be submitted to the
		Branch Chief, Waste
		Identification Branch,
		OSW (Mail Code 5304),
		U.S. EPA, 401 M Street,
		S.W., Washington, DC
		20460 within the time
		period specified.
		Records of operating
		conditions and
		analytical data from
		Condition (1) must be
		compiled, summarized,
		and maintained on site
		for a minimum of three
		years. These records and
		data must be furnished
		upon request by EPA or
		the State of Washington
		and made available for
		inspection. Failure to
		submit the required data
		within the specified
		time period or to
		maintain the required
		records on site for the
		specified time will be

		considered by EPA, at
		its discretion, suffi-
		cient basis to revoke
		the exclusion to the
		extent directed by EPA.
		All data must be
		accompanied by a signed
		copy of the following
		certification statement
		to attest to the truth
		and accuracy of the data
		submitted:
		Under civil and criminal
		penalty of law for the
		making or submission of
		false or fraudulent
		statements or
		representations
		(pursuant to the
		applicable provisions of
		the Federal Code, which
		include, but may not be
		limited to, 18 USC 1001
		and 42 USC 6928), I
		certify that the
		information contained in
		or accompanying this
		document is true,
		accurate, and complete.
		As to the (those)
		identified section(s) of
		this document for which
		I cannot personally ver-
		ify its (their) truth
		and accuracy, I certify
		as the official having
		supervisory
		responsibility for the
		persons who, acting
		under my direct
		instructions, made the
		verification that this
		information is true,
		accurate, and complete.
		In the event that any of
		this information is
		determined by EPA in its
		sole discretion to be
		false, inaccurate, or
		incomplete, and upon
		conveyance of this fact
		to DOE, I recognize and
		agree that this
		exclusion of waste will
		be void as if it never
		had effect or to the
		extent directed by EPA
		and that the DOE will be
		liable for any actions
		taken in contravention
		of its RCRA and CERCLA
		obligations premised
		upon DOE's reliance on
		the void exclusion.
Envirite of Illinois	Harvey, Illinois	See waste description
(formerly Envirite Corporation)		under Envirite of Penn-
Envirite of Ohio	Canton, Ohio	sylvania.
(formerly Envirite Corporation)		See waste description
Envirite of Pennsylvania	York, Pennsylvania	under Envirite of Penn-
(formerly Envirite Corporation)		sylvania.
Envirite of Pennsylvania	York, Pennsylvania	Spent pickle liquor (EPA
(formerly Envirite Corporation)		Hazardous Waste No.
		K062) generated from
		steel finishing
		operations of facilities
		within the iron and
		steel industry (SIC
		Codes 331 and 332);
		wastewater treatment
		sludge (EPA Hazardous

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	Waste No. K002)
	generated from the
	production of chrome
	yellow and orange
	pigments; wastewater
	treatment sludge (EPA
	Hazardous Waste No.
	K003) generated from the
	production of molybdate
	orange pigments;
	wastewater treatment
	sludge (EPA Hazardous
	Waste No. K004)
	generated from the
	production of zinc yel-
	low pigments; wastewater
	treatment sludge (EPA
	Hazardous Waste K005)
	generated from the
	production of chrome
	green pigments;
	wastewater treatment
	sludge (EPA Hazardous
	Waste No. K006)
	generated from the
	production of chrome
	oxide green pigments
	(anhydrous and
	hydrated); wastewater
	treatment sludge (EPA
	Hazardous Waste No.
	K007) generated from the
	production of iron blue
	pigments; oven resi-
	dues (EPA Hazardous
	Waste No. K008)
	generated from the
	production of chrome
	oxide green pigments
	after November 14, 1986.
	To ensure that hazardous
	constituents are not
	present in the waste at
	levels of regulatory
	concern, the facility
	must implement a
	contingency testing
	program for the
	petitioned wastes. This
	testing program must
	meet the following
	conditions for the
	exclusions to be valid:
	(1) Each batch of
	treatment residue must
	be representatively
	sampled and tested using
	the EP Toxicity test for
	arsenic, barium,
	cadmium, chromium, lead,
	selenium, silver,
	mercury, and nickel. If
	the extract concen-
	trations for chromium,
	lead, arsenic, and sil-
	ver exceed 0.315 ppm;
	barium levels exceed 6.3
	ppm; cadmium and
	selenium exceed 0.063
	ppm; mercury exceeds
	0.0126 ppm; or nickel
	levels exceed 2.205 ppm,
	the waste must be
	retreated or managed and
	disposed as a hazardous
	waste under 40 CFR Parts
	262 to 265 and the
	permitting standards of
	40 CFR Part 270.
	(2) Each batch of
	treatment residue must
	be tested for reactive
	and leachable cyanide.
	If the reactive cyanide

	levels exceed 250 ppm;
	or leachable cyanide
	levels (using the EP
	Toxicity test without
	acetic acid adjust-
	ment) exceed 1.26 ppm,
	the waste must be
	re-treated or managed
	and disposed as
	hazardous waste under 40
	CFR Parts 262 to 265 and
	the permitting standards
	of 40 CFR 270.
	(3) Each batch of waste
	must be tested for the
	total content of
	specific organic
	toxics. If the total
	content of anthracene
	exceeds 76.8 ppm,
	1,2-diphenyl hydrazine
	exceeds 0.001 ppm,
	methylene chloride
	exceeds 8.18 ppm, methyl
	ethyl ketone exceeds 326
	ppm,
	n-nitrosodiphenylamine
	exceeds 11.9 ppm, phenol
	exceeds 1,566 ppm, te-
	trachloroethylene
	exceeds 0.188 ppm, or
	trichloroethylene
	exceeds 0.592 ppm, the
	waste must be managed
	and disposed as a
	hazardous waste under 40
	CFR Parts 262 to 265 and
	the permitting standards
	of 40 CFR Part 270.
	(4) A grab sample must be
	collected from each
	batch to form one
	monthly composite sample
	which must be tested
	using GC/MS analysis for
	the compounds listed
	in#3, above, as well as
	the remaining organics
	on the priority
	pollutant list. (See 47
	FR 52309, November 19,
	1982, for a list of the
	priority pollutants.)
	(5) The data from
	conditions 1-4 must be
	kept on file at the
	facility for inspection
	purposes and must be
	compiled, summarized,
	and submitted to the
	Administrator by
	certified mail
	semi-annually. The
	Agency will review this
	information and if
	needed will propose to
	modify or withdraw the
	exclusion. The organics
	testing described in
	conditions 3 and 4,
	above, is not required
	until six months from
	the date of
	promulgation. The
	Agency's decision to
	conditionally exclude
	the treatment residue
	generated from the
	wastewater treatment
	systems at these fa-
	cilities applies only to
	the wastewater and
	solids treatment systems
	as they presently exist

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		as described in the
		delisting petition. The
		exclusion does not apply
		to the proposed process
		additions described in
		the petition as
		recovery, including
		crystallization,
		electrolytic metals
		recovery, evaporative
		recovery, and ion
		exchange.
Giant Refining	Bloomfield,	Waste generated during the
Company, Inc	New Mexico	excavation of soils from
		two wastewater treatment
		impoundments (referred
		to as the South and
		North Oily Water Ponds)
		used to contain water
		outflow from an API
		separator (EPA Hazardous
		Waste No. K051). This is
		a one-time exclusion for
		approximately 2,000 cu-
		bic yards of stockpiled
		waste. This exclusion
		was published on
		September 3, 1996.
		Notification Requirements:
		Giant Refining Company
		must provide a one-time
		written notification to
		any State Regulatory
		Agency to which or
		through which the
		delisted waste described
		above will be
		transported for disposal
		at least 60 days prior
		to the commencement of
		such activities. Failure
		to provide such a
		notification will result
		in a violation of the
		delisting petition and a
		possible revocation of
		the decision.
LCP	Orrington,	Brine purification muds
Chemical	ME	and wastewater treat-
		ment sludges generated
		after August 27, 1985
		from their chloralkali
		manufacturing operations
		(EPA Hazardous Waste
		Nos. K071 and K106) that
		have been batch tested
		for mercury using the
		EPA toxicity pro-
		cedures and have been
		found to contain less
		than 0.05 ppm mercury in
		the EP extract. Brine
		purification muds and
		wastewater treatment
		sludges that exceed this
		level will be considered
		a hazardous waste.
Marathon Oil	Texas City,	Residual solids (at a
Co.	Texas	maximum annual genera-
		tion rate of 1,000 cubic
		yards) generated from
		the thermal desorption
		treatment and, where
		necessary, stabilization
		of wastewater treatment
		plant API/DAF filter
		cake (EPA Hazardous
		Waste Nos. K048 and
		K051), after [July 27,
		1993]. Marathon must
		implement a testing
		program that meets the
		following conditions for
		the exclusion to be

		valid:
		(1)Testing:
		Sample collection and
		analyses (including
		quality control (QC)
		procedures) must be
		performed according to
		SW-846 methodologies. If
		EPA judges the treatment
		process to be effective
		under the operating
		conditions used during
		the initial verification
		testing, Marathon may
		replace the testing
		required in Condition
		(1)(A) with the testing
		required in Condition
		(1)(B). Marathon must
		continue to test as
		specified in Condition
		(1)(A), including
		testing for organics in
		Conditions (3)(B) and
		(3)(C), until and unless
		notified by EPA in
		writing that testing in
		Condition (1)(A) may be
		replaced by Condition
		(1)(B), or that testing
		for organics may be
		terminated as described
		in (1)(C) (to the extent
		directed by EPA).
		(A)Initial
		Verification
		Testing: During at
		least the first 40
		operating days of full-
		scale operation of the
		thermal desorption unit,
		Marathon must monitor
		the operating conditions
		and analyze 5-day
		composites of residual
		solids. 5-day composites
		must be composed of
		representative grab
		samples collected from
		every batch during each
		5-day period of
		operation. The samples
		must be analyzed prior
		to disposal of the
		residual solids for
		constituents listed in
		Condition (3). Marathon
		must report the
		operational and
		analytical test data,
		including quality
		control information,
		obtained during this
		initial period no later
		than 90 days after the
		treatment of the first
		full-scale batch.
		(B)Subsequent
		Verification
		Testing: Following
		notification by EPA,
		Marathon may substitute
		the testing conditions
		in (1)(B) for (1)(A).
		Marathon must continue
		to monitor operating
		conditions, and analyze
		samples representative
		of each month of
		operation. The samples
		must be composed of
		representative grab
		samples collected during
		at least the first five

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	days of operation of
	each month. These
	monthly representative
	samples must be analyzed
	for the constituents
	listed in Condition (3)
	prior to the disposal of
	the residual solids.
	Marathon may, at its
	discretion, analyze
	composite samples
	gathered more frequently
	to demonstrate that
	smaller batches of waste
	are nonhazardous.
	(C)Termination of
	Organic Testing:
	Marathon must continue
	testing as required
	under Condition (1)(B)
	for organic constitu-
	ents specified in
	Conditions (3)(B) and
	(3)(C) until the
	analyses submitted under
	Condition (1)(B) show a
	minimum of four consec-
	utive monthly
	representative samples
	with levels of specific
	constituents
	significantly below the
	delisting levels in
	Conditions (3)(B) and
	(3)(C), and EPA notifies
	Marathon in writing that
	monthly testing for
	specific organic
	constituents may be
	terminated. Following
	termination of monthly
	testing, Marathon must
	continue to test a
	representative 5-day
	composite sample for all
	constituents listed in
	Conditions (3)(B) and
	(3)(C) on an annual
	basis. If delisting
	levels for any
	constituents listed in
	Conditions (3)(B) and
	(3)(C) are exceeded in
	the annual sample,
	Marathon must
	reinstitute complete
	testing as required in
	Condition (1)(B).
	(2)Waste Holding and
	Handling: Mar-
	athon must store as
	hazardous all residual
	solids generated until
	verification testing (as
	specified in Conditions
	(1)(A) and (1)(B)) is
	completed and valid
	analysis demonstrates
	that Condition (3) is
	satisfied. If the levels
	of hazardous
	constituents in the
	samples of residual
	solids are below all of
	the levels set forth in
	Condition (3), then the
	residual solids are
	non-hazardous and may be
	managed and disposed of
	in accordance with all
	applicable solid waste
	regulations. If haz-
	ardous constituent
	levels in any 5-day com-

	posite or other
	representative sample
	equal or exceed any of
	the delisting levels set
	in Condition (3), the
	residual solids
	generated during the
	corresponding time
	period must be retreated
	and/or stabilized as
	allowed below, until the
	residual solids meet
	these levels, or managed
	and disposed of in ac-
	cordance with Subtitle C
	of RCRA.
	If the residual solids
	contain leachable inor-
	ganic concentrations at
	or above the delisting
	levels set forth in
	Condition (3)(A), then
	Marathon may stabilize
	the material with Type 1
	portland cement as
	demonstrated in the
	petition to immobilize
	the metals. Following
	stabilization, Marathon
	must repeat analyses in
	Condition (3)(A) prior
	to disposal.
	(3)Delisting
	Levels: Leachable
	concentrations in
	Conditions (3)(A) and
	(3)(B) must be measured
	in the waste leachate by
	the method specified in
	40 CFR 261.24. The
	indicator parameters in
	Condition (3)(C) must be
	measured as the total
	concentration in the
	waste. Concentrations
	must be less than the
	following levels (ppm):
	(A)Inorganic
	Constituents:
	antimony-0.6; arsenic,
	chromium, or silver-5.0;
	barium -100.0;
	beryllium-0.4;
	cadmium-0.5; lead-1.5;
	mercury-0.2;
	nickel-10.0;
	selenium-1.0;
	vanadium-20.0.
	(B)Organic
	Constituents:
	acenaphthene-200;
	benzene-0.5;
	benzo(a)anthracene-0.01;
	benzo(a)pyrene-0.02;
	benzo(b)fluoranthene-0.02;
	chrysene-0.02; ethyl
	benzene-70;
	fluoranthene-100;
	fluorene-100;
	naphthalene-100;
	pyrene-100; toluene-100.
	(C)Indicator
	Parameters:
	1-methyl naphthalene-3;
	benzo(a)pyrene-3.
	(4)Changes in
	Operating
	Conditions: After
	completing the initial
	verification test period
	in Condition (1)(A), if
	Marathon significantly
	changes the operating
	conditions established

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		under Condition (1),
		Marathon must notify the
		Agency in writing. After
		written approval by EPA,
		Marathon must re-
		institute the testing
		required in Condition
		(1)(A) for a minimum of
		four 5-day operating
		periods. Marathon must
		report the operations
		and test data, required
		by Condition (1)(A),
		including quality
		control data, obtained
		during this period no
		later than 60 days after
		the changes take place.
		Following written
		notification by EPA,
		Marathon may replace
		testing Condition (1)(A)
		with (1)(B). Marathon
		must fulfill all other
		requirements in
		Condition (1), as
		appropriate.
		(5)Data
		Submittals: At
		least two weeks prior to
		system start-up.
		Marathon must notify in
		writing the Section
		Chief Delisting Section
		(see address below) when
		the thermal desorption
		and stabilization units
		will be on-line and
		waste treatment will
		begin. The data obtained
		through Condition (1)(A)
		must be submitted to the
		Section Chief, Delisting
		Section, OSW (OS-333),
		U.S. EPA, 401 M Street,
		SW., Washington, DC
		20460 within the time
		period specified.
		Records of operating
		conditions and analyt-
		ical data from Condition
		(1) must be compiled,
		summarized, and
		maintained on site for a
		minimum of five years.
		These records and data
		must be furnished upon
		request by EPA or the
		State of Texas and made
		available for
		inspection. Failure to
		submit the required data
		within the specified
		time period or maintain
		the required records on
		site for the specified
		time will be considered
		by EPA, at its
		discretion, sufficient
		basis to revoke the
		exclusion to the extent
		directed by EPA. All
		data must be accompanied
		by a signed copy of the
		following certification
		statement to attest to
		the truth and accuracy
		of the data submitted:
		Under civil and criminal
		penalty of law for the
		making or submission of
		false or fraudulent
		statements or
		representations

		(pursuant to the
		applicable provisions of
		the Federal Code, which
		include, but may not be
		limited to, 18 U.S.C.
		1001 and 42 U.S.C 6928),
		I certify that the
		information contained in
		or accompanying this
		document is true, accu-
		rate, and complete.
		As to the (those)
		identified sections(s)
		of this document for
		which I cannot
		personally verify its
		(their) truth and
		accuracy, I certify as
		the company official
		having supervisory re-
		sponsibility for the
		persons who, acting un-
		der my direct
		instructions, made the
		verification that this
		information is true,
		accurate, and complete.
		In the event that any of
		this information is
		determined by EPA in its
		sole discretion to be
		false, inaccurate, or
		incomplete, and upon
		conveyance of this fact
		to the company, I
		recognize and agree that
		this exclusion of waste
		will be void as if it
		never had effect or to
		the extent directed by
		EPA and that the company
		will be liable for any
		actions taken in
		contravention of the
		company's RCRA and
		CERCLA obligations
		premised upon the
		company's reliance on
		the void exclusion.
Mearl Corp.	Peekskill,	Wastewater treatment
	NY	sludge (EPA Hazardous
		Waste Nos. K006 and
		K007) generated from the
		production of chrome
		oxide green and iron
		blue pigments after
		November 27, 1985.
Monsanto	Sauget,	Brine purification muds
Industrial	Illinois	(EPA Hazardous Waste No.
Chemicals		K071) generated from the
Company		mercury cell process in
		chlorine production,
		where separately
		prepurified brine is not
		used after August 15,
		1986
Occidental	Ingleside,	Limestone Sludge, (at a
Chemical.	Texas.	maximum generation of
		1,114 cubic yards per
		calendar year) Rockbox
		Residue, (at a maximum
		generation of 1,000
		cubic yards per calendar
		year) generated by
		Occidental Chemical
		using the wastewater
		treatment process to
		treat the Rockbox
		Residue and the
		Limestone Sludge (EPA
		Hazardous Waste No.
		K019, K020). Occidental
		Chemical must imple-
		ment a testing program

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		that meets conditions
		found in Table 1. Wastes
		Excluded From
		Non-Specific Sources
		from the petition to be
		valid.
Occidental	Sheffield,	Retorted wastewater
Chemical	Alabama	treatment sludge from
Corp.		the mercury cell process
Muscle Shoals		in chlorine production
Plant		(EPA Hazardous Waste No.
		K106) after September
		19, 1989. This exclusion
		is conditional upon the
		submission of data ob-
		tained from Occidental's
		full-scale retort
		treatment system because
		Occidental's original
		data were based on a
		pilot-scale retort
		system. To ensure that
		hazardous constituents
		are not present in the
		waste at levels of
		regulatory concern once
		the full-scale treatment
		facility is in
		operation, Occidental
		must implement a testing
		program. All sampling
		and analyses (including
		quality control
		procedures) must be
		performed according to
		SW-846 procedures. This
		testing program must
		meet the following
		conditions for the
		exclusion to be valid:
		(1) Initial Testing -
		During the first four
		weeks of full-scale
		retort operation,
		Occidental must do the
		following:
		(A) Collect representative
		grab samples from every
		batch of retorted
		material and composite
		the grab samples to
		produce a weekly
		composite sample. The
		weekly composite
		samples, prior to
		disposal or recycling,
		must be analyzed for the
		EP leachate con-
		centrations of all the
		EP toxic metals (ex-
		cept mercury), nickel,
		and cyanide (using
		distilled water in the
		cyanide extractions),
		and the total
		constituent
		concentrations of
		reactive sulfide and
		reactive cyanide. Occi-
		dental must report the
		analytical test data,
		including all quality
		control data, obtained
		during this initial
		period no later than 90
		days after the treatment
		of the first full-scale
		batch.
		(B) Collect representative
		grab samples of every
		batch of retorted
		material prior to its
		disposal or recycling
		and analyze the sample

		for EP leachate
		concentration of mercur-
		ry. Occidental must
		report the analytical
		test data, including all
		quality control data,
		within 90 days after the
		treatment of the first
		full -scale batch.
		(2) Subsequent Testing -
		After the first four
		weeks of full-scale
		retort operation, Occi-
		dental must do the
		following:
		(A) Continue to sample and
		test as described in
		condition (1)(A).
		Occidental must compile
		and store on-site for a
		minimum of three years
		all analytical data and
		quality control data.
		These data must be
		furnished upon request
		and made available for
		inspection by any
		employee or
		representative of EPA or
		the State of Alabama.
		These testing re-
		quirements shall be
		terminated by EPA when
		the results of four
		consecutive weekly
		composite samples of the
		petitioned waste,
		obtained from either the
		initial testing or
		subsequent testing show
		the maximum allowable
		levels in condition (3)
		are not exceeded and the
		Section Chief, Variances
		Section, notifies
		Occidental that the
		requirements of this
		condition have been
		lifted.
		(B) Continue to sample and
		test for mercury as
		described in condition
		(1)(B).
		Occidental must compile
		and store on-site for a
		minimum of three years
		all analytical data and
		quality control data.
		These data must be
		furnished upon request
		and made available for
		inspection by any
		employee or rep-
		resentative of EPA or
		the State of Alabama.
		These testing
		requirements shall
		remain in effect until
		Occidental provides EPA
		with analytical and
		quality control data for
		thirty consecutive
		batches of retorted
		material, collected as
		described in condition
		(1)(B), demonstrating
		that the EP leachable
		levels of mercury are
		below the maximum allow-
		able level in condition
		(3) and the Section
		Chief, Variances
		Section, notifies
		Occidental that the

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	testing in condition
	(2)(B) may be replaced
	with (2)(C).
	(C) [If the conditions in
	(2)(B) are satisfied,
	the testing requirements
	for mercury in (2)(B)
	shall be replaced with
	the following condi-
	tion]. Collect
	representative grab
	samples from every batch
	of retorted material on
	a daily basis and
	composite the grab
	samples to produce a
	weekly composite sample.
	Occidental must analyze
	each weekly composite
	sample prior to its
	disposal or recycling
	for the EP leachate
	concentration of mercur-
	ry. Occidental must
	compile and store on-
	site for a minimum of
	three years all analyti-
	cal data and quality
	control data. These data
	must be furnished upon
	request and made
	available for inspection
	by any employee or
	representative of EPA or
	the State of Alabama.
	(3) If, under condition
	(1) or (2), the EP
	leachate concentrations
	for chromium, lead, ar-
	senic, or silver exceed
	1.616 mg/l; for barium
	exceeds 32.3 mg/l; for
	cadmium or selenium
	exceed 0.323 mg/l; for
	mercury exceeds 0.065
	mg/l, for nickel exceeds
	16.15 mg/l; for cyanide
	exceeds 22.61 mg/l; or
	for total reactive
	cyanide or total
	reactive sulfide levels
	exceed 250 mg/kg and 500
	mg/kg, respectively, the
	waste must either be
	retreated until it meets
	these levels or managed
	and disposed of in
	accordance with subtitle
	C of RCRA.
	(4) Within one week of
	system start-up, Occi-
	dental must notify the
	Section Chief, Vari-
	ances Section (see
	address below) when the
	full-scale retort system
	is on-line and waste
	treatment has begun. All
	data obtained through
	condition (1) must be
	submitted to the Section
	Chief, Variances Sec-
	tion, PSPD/OSW (OS-343),
	U.S. EPA, 401 M Street
	SW., Washington, DC
	20460 within the time
	period specified in
	condition (1). At the
	Section Chief's request,
	Occidental must submit
	any other analytical
	data obtained through
	condition (2) to the
	above address, within

		the time period
		specified by the Section
		Chief. Failure to submit
		the required data will
		be considered by the
		Agency sufficient basis
		to revoke Occidental's
		exclusion to the extent
		directed by EPA. All
		data must be accompanied
		by the following
		certification statement:
		Under civil and criminal
		penalty of law for the
		making or submission of
		false or fraudulent
		statements or
		representations
		(pursuant to the
		applicable provisions of
		the Federal Code which
		include, but may not be
		limited to, 18 U.S.C.
		6928), I certify that
		the information
		contained in or
		accompanying this
		document is true,
		accurate and complete.
		As to the (those)
		identified section(s) of
		this document for which
		I cannot personnal veri-
		fy its (their) truth and
		accuracy, I certify as
		the company official
		having supervisory re-
		sponsibility for the
		persons who, acting un-
		der my direct
		instructions, made the
		verification that this
		information is true,
		accurate and complete.
		In the event that any of
		this information is
		determined by EPA in its
		sole discretion to be
		false, inaccurate or
		incomplete, and upon
		conveyance of this fact
		to the company, I
		recognize and agree that
		this exclusion of wastes
		will be void as if it
		never had effect or to
		the extent directed by
		EPA and that the company
		will be liable for any
		actions taken in
		contravention of the
		company's RCRA and
		CERCLA obligations
		premised upon the
		company's reliance on
		the void exclusion.
Occidental	Delaware City,	Sodium chloride treatment
Chemical	Delaware	muds
Corporation		(NaCl-TM), sodium
		chloride saturator
		cleanings (NaCl-SC), and
		potassium chloride
		treatment muds (KCl-TM)
		(all classified as EPA
		Hazardous Waste No.
		K0701) generated at a
		maximum combined rate
		(for all three wastes)
		of 1.018 tons per year.
		This exclusion was
		published on April 29,
		1991 and is conditioned
		upon the collection of
		data from Occidental's

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	full-scale brine treat-
	ment system because
	Occidental's request for
	exclusion was based on
	data from a
	laboratory-scale brine
	treatment process. To
	ensure that hazardous
	constituents are not
	present in the waste at
	levels of regulatory
	concern once the
	full-scale treatment
	system is in operation,
	Occidental must im-
	plement a testing
	program for the
	petitioned waste. All
	sampling and analyses
	(including quality
	control procedures) must
	be performed according
	to SW-846 methodolo-
	gies. This testing
	program must meet the
	following conditions for
	the exclusion to be
	valid:
	(1) Initial
	Testing: During the
	first four weeks of
	full-scale treatment
	system operation,
	Occidental must do the
	following:
	(A) Collect representative
	grab samples from each
	batch of the three
	treated wastestreams
	(sodium chloride
	saturator cleanings
	(NaCl-SC), sodium
	chloride treatment muds
	(NaCl-TM) and potassium
	chloride treatment muds
	(KCl-TM)) on an as
	generated basis, and
	composite the samples to
	produce three separate
	weekly composite samples
	(of each type of K071
	waste). The three weekly
	composite samples, prior
	to disposal, must be
	analyzed for the EP
	leachate concentrations
	of all the EP toxic
	metals (except mercury),
	nickel and cyanide
	(using deionized water
	in the cyanide ex-
	tractions), and the
	total constituent
	concentrations of
	reactive sulfide and
	reactive cyanide.
	Occidental must report
	the waste volumes
	produced and the
	analytical test data,
	including all quality
	control data, obtained
	during this initial
	period, no later than 90
	days after the treatment
	of the first full-scale
	batch.
	(B) Collect representative
	grab samples of each
	batch of the three
	treated wastestreams
	(NaCl-SC, NaCl-TM and
	KCl-TM) and composite
	the grab samples to pro-

	duce three separate
	daily composite sam-
	ples (of each type of
	K071 waste) on an as
	generated basis. The
	three daily composite
	samples, prior to
	disposal, must be ana-
	lyzed for the EP
	leachate concentration
	of mercury. Occidental
	must report the waste
	volumes produced and the
	analytical test data,
	including all quality
	control data, obtained
	during this initial
	period, no later than 90
	days after the treatment
	of the first full-scale
	batch.
	(2) Subsequent
	Testing: After the
	first four weeks of
	full-scale treatment
	operations, Occidental
	must do the following
	(all sampling and
	analyses (including
	quality control
	procedures) must be
	performed according to
	SW-846 procedures):
	(A) Continue to sample and
	test as described in
	condition (1)(A).
	Occidental must compile
	and store on-site for a
	minimum of three years
	the records of waste
	volumes produced and all
	analytical data and
	quality control data.
	These data must be
	furnished upon request
	and made available for
	inspection by any
	employee or
	representative of EPA or
	the State of Delaware.
	These testing
	requirements shall be
	terminated by EPA when
	the results of four
	consecutive weekly
	composite samples of the
	petitioned waste,
	obtained from either the
	initial testing or
	subsequent testing, show
	the maximum allowable
	levels in condition (3)
	are not exceeded and the
	Section Chief, Vari-
	ances Section, notifies
	Occidental that the
	requirements of this
	condition have been
	lifted.
	(B) Continue to sample and
	test for mercury as
	described in condition
	(1)(B). Occidental must
	compile and store
	on-site for a minimum of
	three years the records
	of waste volumes
	produced and all
	analytical data and
	quality control data.
	These data must be
	furnished upon request
	and made available for
	inspection by any

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	employee or rep-
	resentative of EPA or
	the State of Delaware.
	These testing
	requirements shall be
	terminated and replaced
	with the requirements of
	condition (2)(C) if
	Occidental provides EPA
	with analytical and
	quality control data for
	thirty consecutive
	batches of treated
	material, collected as
	described in condition
	(1)(B), demonstrating
	that the EP leachable
	level of mercury in
	condition (3) is not
	exceeded (in all three
	treated wastes), and the
	Section Chief, Variances
	Section, notifies
	Occidental that the
	testing in condition
	(2)(B) may be replaced
	with (2)(C).
	(C) If the conditions in
	(2)(B) are satisfied,
	the testing requirements
	for mercury in (2)(B)
	shall be replaced with
	the following condi-
	tion.] Collect
	representative grab
	samples from each batch
	of the three treated
	wastestreams (NaCl-SC,
	NaCl-TM and KCl-TM) on
	an as generated basis
	and composite the grab
	samples to produce three
	separate weekly
	composite samples (of
	each type of K071
	waste). The three weekly
	composite samples, prior
	to disposal, must be
	analyzed for the EP
	leachate concentration
	of mercury. Occidental
	must compile and store
	on-site for a minimum of
	three years the records
	of waste volumes
	produced and all
	analytical data and
	quality control data.
	These data must be
	furnished upon request
	and made available for
	inspection by any
	employee or
	representative of EPA or
	the State of Delaware.
	(3) If under conditions
	(1) or (2), the EP
	leachate concentration
	for chromium, lead, ar-
	senic, or silver exceeds
	0.77 mg/L; for barium
	exceeds 15.5 mg/L; for
	cadmium or selenium
	exceeds 0.16 mg/L; for
	mercury exceeds 0.031
	mg/L; for nickel or
	total cyanide exceeds
	10.9 mg/L; or the total
	reactive cyanide or
	total reactive sulfide
	levels exceeds 250 mg/kg
	and 500 mg/kg, the waste
	must either be retreated
	or managed and disposed

	of in accordance with
	all applicable hazardous
	waste regulations.
	(4) Within one week of
	system start-up, Occi-
	dental must notify the
	Section Chief, Vari-
	ances Section (see
	address below) when the
	full-scale system is
	on-line and waste
	treatment has begun. All
	data obtained through
	condition (1) must be
	submitted to the Section
	Chief, Variances
	Section, PSPD/OSW,
	(OS-333), U.S. EPA, 401
	M Street, SW.,
	Washington, DC 20460
	within the time period
	required in condition
	(1). At the Section
	Chief's request,
	Occidental must submit
	any other analytical
	data obtained through
	conditions (1) and (2)
	to the above address
	within the time period
	specified by the Section
	Chief. Failure to submit
	the required data will
	be considered by the
	Agency sufficient basis
	to revoke Occidental's
	exclusion to the extent
	directed by EPA. All
	data (either submitted
	to EPA or maintained at
	the site) must be
	accompanied by the
	following statement:
	Under civil and criminal
	penalty of law for the
	making or submission of
	false or fraudulent
	statements or
	representations
	(pursuant to the
	applicable provisions of
	the Federal Code, which
	include, but may not be
	limited to 18 U.S.C.
	1001 and 42 U.S.C.
	6926), I certify that
	the information
	contained in or
	accompanying this
	document is true, accu-
	rate and complete.
	As to the (those)
	identified section(s) of
	this document for which
	I cannot personally ver-
	ify its (their) truth
	and accuracy, I certify
	as the company official
	having supervisory re-
	sponsibility for the
	persons who, acting un-
	der my direct
	instructions, made the
	verification that this
	information is true,
	accurate and complete.
	In the event that any of
	this information is
	determined by EPA in its
	sole discretion to be
	false, inaccurate or
	incomplete, and upon
	conveyance of this fact
	to the company, I

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		recognize and agree that
		this exclusion of wastes
		will be void as if it
		never had effect or to
		the extent directed by
		EPA and that the company
		will be liable for any
		actions taken in
		contravention of the
		company's RCRA and
		CERCLA obligations
		premised upon the
		company's reliance on
		the void exclusion.
Oxy Vinyls	Deer Park, Texas	Rockbox Residue, (at a
		maximum generation of
		1,000 cubic yards per
		calendar year) gen-
		erated by Oxy Vinyls
		using the wastewater
		treatment process to
		treat the Rockbox
		Residue (EPA Hazardous
		Waste No. K017, K019,
		and K020).
		Oxy Vinyls must implement
		a testing program that
		meets the following
		conditions for the
		exclusion to be valid:
		(1) Delisting
		Levels: All
		concentrations for the
		following constituents
		must not exceed the
		following levels (ppm).
		The Rockbox Residue must
		be measured in the waste
		leachate by the method
		specified in 40 CFR
		261.24.
		(A) Rockbox Residue:
		(i) Inorganic
		Constituents:
		Barium-200; Chro-
		mium-5.0; Copper-130;
		Lead+1.5; Tin-2, 100;
		Vanadium-30;
		Zinc-1,000
		(ii) Organic Constituents:
		Acetone-400; Di-
		chloromethane-1.0;
		Dimethylphthalate-4,
		000; Xylene-10,000;
		2,3,7,8-TCDD Equiva-
		lent-0.00000006
		(2) Waste Holding
		and Handling: Oxy
		Vinyls must store in
		accordance with its RCRA
		permit, or continue to
		dispose of as hazardous
		waste all Rockbox
		Residue generated until
		the verification testing
		described in Condition
		(3)(B), as appropriate,
		is completed and valid
		analyses demonstrate
		that condition (3) is
		satisfied. If the levels
		of constituents measured
		in the samples of the
		Rockbox Residue do not
		exceed the levels set
		forth in Condition (1),
		then the waste is
		nonhazardous and may be
		managed and disposed of
		in accordance with all
		applicable solid waste
		regulations. If con-
		stituent levels in a
		sample exceed any of the

		delisting levels set in
		Condition 1, waste
		generated during the
		time period corre-
		sponding to this sample
		must be managed and
		disposed of in
		accordance with subtitle
		C of RCRA.
		(3) Verification
		Testing Requirements:
		Sample collection
		and analyses, includ-
		ing quality control
		procedures, must be per-
		formed according to
		SW-846 methodologies. If
		EPA judges the
		incineration process to
		be effective under the
		operating conditions
		used during the initial
		verification testing,
		Oxy Vinyls may replace
		the testing required in
		Condition (3)(A) with
		the testing required in
		Condition (3)(B). Oxy
		Vinyls must continue to
		test as specified in
		Condition (3)(A) until
		and unless notified by
		EPA in writing that
		testing in Condition
		(3)(A) may be replaced
		by Condition (3)(B).
		(A) Initial
		Verification
		Testing: (i) When
		the Rockbox unit is
		decommissioned for clean
		out, after the final
		exclusion is granted,
		Oxy Vinyls must collect
		and analyze composites
		of the Rockbox Residue.
		Two composites must be
		composed of rep-
		resentative grab samples
		collected from the
		Rockbox unit. The waste
		must be analyzed, prior
		to disposal, for all of
		the constituents listed
		in Condition 1. No later
		than 90 days after the
		Rockbox unit is
		decommissioned for clean
		out the first two times
		after this exclusion
		becomes final, Oxy
		Vinyls must report the
		operational and
		analytical test data,
		including quality
		control information.
		(B) Subsequent
		Verification
		Testing: Following
		written notification by
		EPA, Oxy Vinyls may
		substitute the testing
		conditions in (3)(B) for
		(3)(A)(i). Oxy Vinyls
		must continue to monitor
		operating conditions,
		analyze samples
		representative of each
		cleanout of the Rockbox
		of operation during the
		first year of waste
		generation.
		(C) Termination of
		Organic Testing for the

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	Rockbox Residue:Oxy
	Vinyls must continue
	testing as required
	under Condition (3)(B)
	for organic constituents
	specified under
	Condition (3)(B) for
	organic constituents
	specified in Condition
	(1)(A)(ii) until the
	analyses submitted under
	Condition (3)(B) show a
	minimum of two
	consecutive annual
	samples below the
	delisting levels in
	Condition (1)(A)(ii),
	Oxy Vinyls may then
	request that annual
	organic testing be
	terminated. Following
	termination of the
	quarterly testing, Oxy
	Vinyls must continue to
	test a representative
	composite sample for all
	constituents listed in
	Condition (1) on an
	annual basis (no later
	than twelve months after
	exclusion).
	(4) Changes in
	Operating
	Conditions: If Oxy
	Vinyls significantly
	changes the process
	which generate(s) the
	waste(s) and which may
	or could affect the
	composition or type
	waste(s) generated as
	established under
	Condition (1) (by
	illustration, but not
	limitation, change in
	equipment or operating
	conditions of the
	treatment process), Oxy
	Vinyls must notify the
	EPA in writing and may
	no longer handle the
	wastes generated from
	the new process or no
	longer discharges as
	nonhazardous until the
	wastes meet the
	delisting levels set
	Condition (1) and it has
	received written
	approval to do so from
	EPA.
	(5) Data
	Submittals: The
	data obtained through
	Condition 3 must be
	submitted to Mr. William
	Gallagher, Chief, Region
	6 Delisting Program,
	U.S. EPA, 1445 Ross
	Avenue, Dallas, Texas
	75202-2733, Mail Code,
	(6PD-O) within the time
	period specified.
	Records of operating
	conditions and
	analytical data from
	Condition (1) must be
	compiled, summarized,
	and maintained on site
	for a minimum of five
	years. These records and
	data must be furnished
	upon request by EPA, or
	the State of Texas, and

	made available for
	inspection. Failure to
	submit the required data
	within the specified
	time period or maintain
	the required records on
	site for the specified
	time will be considered
	by EPA, at its
	discretion, sufficient
	basis to revoke the
	exclusion to the extent
	directed by EPA. All
	data must be accompanied
	by a signed copy of the
	following certification
	statement to attest to
	the truth and accuracy
	of the data submitted:
	Under civil and criminal
	penalty of law for the
	making or submission of
	false or fraudulent
	statements or
	representations
	(pursuant to the
	applicable provisions of
	the Federal Code, which
	include, but may not be
	limited to, 18 U.S.C.
	1001 and 42 U.S.C.
	6928), I certify that
	the information
	contained in or
	accompanying this
	document is true, accu-
	rate and complete.
	As to the (those)
	identified section(s) of
	this document for which
	I cannot personally ver-
	ify its (their) truth
	and accuracy, I certify
	as the company official
	having supervisory re-
	sponsibility for the
	persons who, acting un-
	der my direct
	instructions, made the
	verification that this
	information is true,
	accurate and complete.
	In the event that any of
	this information is
	determined by EPA in its
	sole discretion to be
	false, inaccurate or
	incomplete, and upon
	conveyance of this fact
	to the company, I
	recognize and agree that
	this exclusion of waste
	will be void as if it
	never had effect or to
	the extent directed by
	EPA and that the company
	will be liable for any
	actions taken in
	contravention of the
	company's RCRA and
	CERCLA obligations
	premised upon the
	company's reliance on
	the void exclusion.
	(6) Reopener
	Language:
	(A) If, anytime after
	disposal of the delisted
	waste, Oxy Vinyls
	possesses or is other-
	wise made aware of any
	environmental data
	(including but not
	limited to leachate data

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		or groundwater
		monitoring data) or any
		other data relevant to
		the delisted waste
		indicating that any
		constituent identified
		for the delisting
		verification testing is
		at level higher than the
		delisting level allowed
		by the Director in
		granting the petition,
		then the facility must
		report the data, in
		writing, to the Di-
		rector within 10 days of
		first possessing or being
		made aware of that data.
		(B) If the annual testing
		of the waste does not
		meet the delisting
		requirements in Para-
		graph 1, Oxy Vinyls must
		report the data, in
		writing, to the Director
		within 10 days of first
		possessing or being made
		aware of that data.
		(C) Based on the
		information described in
		paragraphs (A) or (B)
		and any other infor-
		mation received from any
		source, the Director
		will make a preliminary
		determination as to
		whether the reported
		information requires
		Agency action to protect
		human health or the
		environment. Further
		action may include
		suspending, or revoking
		the exclusion, or other
		appropriate response
		necessary to protect
		human health and the
		environment.
		(D) If the Director
		determines that the
		reported information
		does require Agency
		action, the Director
		will notify the facility
		in writing of the
		actions the Director
		believes are necessary
		to protect human health
		and the environment. The
		notice shall include a
		statement of the
		proposed action and a
		statement providing the
		facility with an op-
		portunity to present
		information as to why
		the proposed Agency
		action is not neces-
		sary. The facility shall
		have 10 days from the
		date of the Director's
		notice to present such
		information.
		(E) Following the receipt
		of information from the
		facility described in
		paragraph (D) or (if no
		information is presented
		under paragraph (D)) the
		initial receipt of
		information described in
		paragraphs (A) or (B),
		the Director will issue
		a final written

		determination describing
		the Agency actions that
		are necessary to protect
		human health or the
		environment. Any
		required action
		described in the
		Director's determination
		shall become effective
		immediately, unless the
		Director provides
		otherwise.
		(7) Notification
		Requirements: Oxy
		Vinyls must provide a
		one-time written noti-
		fication to any State
		Regulatory Agency to
		which or through which
		the delisted waste
		described above will be
		transported for dis-
		posal at least 60 days
		prior to the com-
		mencement of such
		activities. Failure to
		provide such a
		notification will result
		in a violation of the
		delisting petition and a
		possible revocation of
		the decision.
Perox,	Sharon,	Iron oxide (EPA Hazardous
Incorporated	Pennsylvania	Waste No. K062)
		generated (at a maximum
		annual rate of 4800
		cubic yards) from a
		spent hydrochloric acid
		pickle liquor
		regeneration plant for
		spent pickle liquor
		generated from steel
		finishing operations.
		This exclusion was pub-
		lished on, November 13,
		1990
Pioneer Chlor	St. Gabriel, LA	Brine purification muds,
Alkai		
Company, Inc.		which have been washed
(formerly		and vacuum filtered,
Stauffer		
Chemical Co.)		generated after August
		27, 1985 from their
		chlor-alkali
		manufacturing operations
		(EPA Hazardous Waste No.
		K071) that have been
		batch tested for mercury
		using the EP toxicity
		procedure and have been
		found to contain less
		than 0.05 ppm in mercury
		in the EP extract. Brine
		purification muds that
		exceed this level will
		be considered a
		hazardous waste.
POP	Shelton,	Wastewater treatment
Fasteners	Connecticut	sludge (EPA Hazardous
		Waste No. F006)
		generated from elec-
		troplating operations
		(at a maximum annual
		rate of 300 cubic yards)
		after December 7, 1992.
		In order to confirm that
		the characteristics of
		the waste do not change
		significantly, the
		facility must, on an
		annual basis, analyze a
		representative composite
		sample for the
		constituents listed in

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		261.24 using the method specified therein. The annual analytical results, including quality control information, must be complied, certified according to 260.22(i)(12) of this chapter, maintained on site for a minimum of five years, and made available for inspection upon request by any employee or representative of EPA or the State of Connecticut. Failure to maintain the required records on site will be considered by EPA, at its discretion, sufficient basis - to revoke the exclusion to the extent directed by EPA.
Rhodia	Houston Texas	Filtercake sludge per 65FR18922 April 10, 2000
Roanoke Electric Steel Corp.	Roanoke, Va	Fully-cured chemically stabilized electric arc furnace dust/sludge (CSEAFD) treatment residue (EPA Hazardous Waste No. K061) generated from the primary production of steel after March 22, 1989. This exclusion is conditioned upon the data obtained from Roanoke's full-scale CSEAFD treatment facility because Roanoke's original data were obtained from a laboratory-scale CSEAFD treatment process. To ensure that hazardous constituents are not present in the waste at levels of regulatory concern once the full-scale treatment facility is in operation, Roanoke must implement a testing program for the petitioned waste. This testing program must meet the following conditions for the exclusion to be valid: (1) Testing: (A) Initial testing: During the first four weeks of operation of the full-scale treatment system, Roanoke must collect representative grab samples of each treated batch of the CSEAFD and composite the grab samples daily. The daily composites, prior to disposal, must be analyzed for the EP leachate concentrations of all the EP toxic metals, nickel and cyanide (using distilled water in the cyanide extractions), and the total constituent concentrations of reactive sulfide and

		reactive cyanide. Analyses must be performed according to SW-846 methodologies. Roanoke must report the analytical test data obtained during this initial period no later than 90 days after the treatment of the first full-scale batch.
		(B) Subsequent testing: Roanoke must collect representative grab samples from every treated batch of CSEAFD generated daily and composite all of the grab samples to produce a weekly composite sample. Roanoke then must analyze each weekly composite sample for all of the EP toxic metals and nickel. Analyses must be performed according to SW-846 methodologies. The analytical data, including all quality control information, must be compiled and maintained on site for a minimum of three years. These data must be furnished upon request and made available for inspection by any employee or representative of EPA or the State of Virginia.
		(2) Delisting levels: If the EP extract concentrations for chromium, lead, arsenic, or silver exceed 0.315 mg/l; for barium exceeds 6.3 mg/l; for cadmium or selenium exceed 0.063 mg/l; for mercury exceeds 0.0126 mg/l; for nickel exceeds 3.15 mg/l; or for cyanide exceeds 1.26 mg/l, or total reactive cyanide or total reactive sulfide levels exceed 250 mg/kg and 500 mg/kg, respectively, the waste must either be re-treated or managed and disposed in accordance with Subtitle C of RCRA.
		(3) Data submittals: Within one week of system start-up, Roanoke must notify the Section Chief, Variances Section (see address below) when their full-scale stabilization system in on-line and waste treatment has begun. All data obtained through the initial testing condition (1)(A), must be submitted to the Section Chief, Variances Section, PSPD/OSW, (OS-343), U.S. EPA, 401 M Street, SW., Washington, DC 20460 within the time period specified in condition

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		(1)(A). Failure to submit the required data or keep the required records will be considered by the Agency, at its discretion, sufficient basis to revoke Roanoke's exclusion. All data must be accompanied by the following certification statement:
		Under civil and criminal penalty of law for the making or submission of false or fraudulent statements or representations (pursuant to the applicable provisions of the Federal Code which include, but may not be limited to, 18 USC 6928), I certify that the information contained in or accompanying this document is true, accurate and complete. As to the (those) identified section(s) of this document for which I cannot personally verify its (their) truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate and complete.
		In the event that any of this information is determined by EPA in its sole discretion to be false, inaccurate or incomplete, and upon conveyance of this fact to the company, I recognize and agree that this exclusion of wastes will be void as if it never had effect or to the extent directed by EPA and that the company will be liable for any actions taken in contravention of the company's RCRA and CERCLA obligations premised upon the company's reliance on the void exclusion.
Texas Eastman	Longview, Texas	Incinerator ash (at a maximum generation of 7,000 cubic yards per calendar year) generated from the incineration of sludge from the wastewater treatment plant (EPA Hazardous Waste No. K009 and K010, and that is disposed of in Subtitle D landfills after September 25, 1996. Texas Eastman must implement a testing program that meets conditions found in Table 1. Wastes Excluded From Non-Specific

		Sources for the petition to be valid.
USX Steel Corporation,	Chicago Illinois	Fully-cured chemically stabilized electric arc furnace dust/sludge (CSEAFD) treatment residue (EPA Hazardous Waste No. K061) generated from the primary production of steel after April 29, 1991. This exclusion (for 35,000 tons of CSEAFD per year) is conditioned upon the data obtained from USX's full-scale CSEAFD treatment facility. To ensure that hazardous constituents are not present in the waste at levels of regulatory concern once the full-scale treatment facility is in operation, USX must implement a testing program for the petitioned waste. This testing program must meet the following conditions for the exclusion to be valid:
		(1) Testing:
		Sample collection and analyses (including quality control (QC) procedures) must be performed according to SW-846 methodologies.
		(A) Initial Testing: During the first four weeks of operation of the full-scale treatment system, USX must collect representative grab samples of each treated batch of the CSEAFD and composite the grab samples daily. The daily composites, prior to disposal, must be analyzed for the EP leachate concentrations of all the EP toxic metals, nickel, and cyanide (using distilled water in the cyanide extractions), and the total concentrations of reactive sulfide and reactive cyanide. USX must report the analytical test data, including quality control information, obtained during this initial period no later than 90 days after the treatment of the first full-scale batch.
		(B) Subsequent testing: USX must collect representative grab samples from every treated batch of CSEAFD generated daily and composite all of the grab samples to produce a weekly composite sample. USX then must analyze each weekly composite sample for all of the EP toxic metals, and

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		nickel. The analytical
		data, including quality
		control information,
		must be compiled and
		maintained on site for a
		minimum of three years.
		These data must be fur-
		nished upon request and
		made available for
		inspection by any
		employee or representa-
		tive of EPA or the State of Illinois.
		(2) Delisting levels: If the EP
		extract concentrations
		for chromium, lead,
		arsenic, or silver
		exceed 0.315 mg/l; for
		barium exceeds 6.3 mg/l;
		for cadmium or selenium
		exceed 0.063 mg/l; for
		mercury exceeds 0.0126
		mg/l; for nickel exceeds
		3.15 mg/l; or for
		cyanide exceeds 4.42
		mg/l, total reactive
		cyanide or total
		reactive sulfide levels
		exceed 250 mg/kg and 500
		mg/kg, respectively, the
		waste must either be
		re-treated until it
		meets these levels or
		managed and disposed of
		in accordance with
		Subtitle C of RCRA.
		(3) Data submittals: Within
		one week of system
		start-up USX must notify
		the Section Chief,
		Delisting Section (see
		address below) when
		their full-scale
		stabilization system is
		on-line and waste
		treatment has begun. The
		data obtained through
		condition (1)(A) must be
		submitted to the Section
		Chief, Delisting
		Section, CAD/OSW (OS-
		333), U.S. EPA, 401 M
		Street, S.W., Wash-
		ington, DC 20460 within
		the time period
		specified. At the
		Section Chief's request,
		USX must submit any
		other analytical data
		obtained through
		conditions (1)(A) or
		(1)(B) within the time
		period specified by the
		Section Chief. Failure
		to submit the required
		data obtained from
		conditions (1)(A) or
		(1)(B) within the
		specified time period or
		maintain the required
		records for the speci-
		fied time will be
		considered by the
		Agency, at its
		discretion, sufficient
		basis to revoke USX's
		exclusion to the extent
		directed by EPA. All
		data must be accompanied
		by the following
		certification statement:
		Under civil and
		criminal penalty of law
		for the making or
		submission of false or

		fraudulent statements or
		representations
		(pursuant to the
		applicable provisions of
		the Federal Code which
		include, but may not be
		limited to, 18 U.S.C.
		6928), I certify that
		the information
		contained in or
		accompanying this
		document is true,
		accurate and complete.
		As to the (those)
		identified section(s) of
		this document for which
		I cannot personally ver-
		ify its (their) truth
		and accuracy, I certify
		as the company official
		having supervisory re-
		sponsibility for the
		persons who, acting un-
		der my direct
		instructions, made the
		verification that this
		information is true,
		accurate and complete.
		In the event that any of
		this information is
		determined by EPA in its
		sole discretion to be
		false, inaccurate or
		incomplete, and upon
		conveyance of this fact
		to the company, I
		recognize and agree that
		this exclusion of wastes
		will be void as if it
		never had effect or to
		the extent directed by
		EPA and that the company
		will be liable for any
		actions taken in
		contravention of the
		company's RCRA and
		CERCLA obligations
		premised upon the
		company's reliance on
		the void exclusion.
Vulcan	Port	Brine purification muds
Materials	Edwards,	(EPA Hazardous Waste No.
Company	WI	K071) generated from the
		mercury cell process in
		chlorine production,
		where separately
		prepurified brine is not
		used after November 17,
		1986. To assure that
		mercury levels in this
		waste are maintained at
		acceptable levels, the
		following conditions
		apply to this exclusion:
		Each batch of treated
		brine clarifier muds and
		saturator insolubles
		must be tested (by the
		extraction procedure)
		prior to disposal and
		the leachate concentration of
		mercury must be less than or
		equal to 0.0129 ppm. If
		the waste does not meet
		this requirement, then
		it must be re-treated or
		disposed of as haz-
		ardous. This exclusion
		does not apply to wastes
		for which either of
		these conditions is not satisfied
Table 3-Wastes Excluded From Commercial Chemical Products,		
Off-Specification Species, Container Residues, and Soil Residues Thereof		

Appendix XI Other Designated Waste

Facility	Address	Waste description
Texas	Longview	Incinerator ash (at a
Eastman	Texas	maximum generation of
		7,000 cubic yards per
		calendar year) generated
		from the incineration of
		sludge from the wastewater
		treatment plant (EPA
		Hazardous Waste No. U001,
		U002, U003, U019, U028,
		U031, U037, U044, U056,
		U069, U070, U107, U108,
		U112, U113, U115, U117,
		U122, U140, U147, U151,

		U154, U159, U161, U169,
		U190, U196, U211, U213,
		U226, U239, and U359, and
		that is disposed of in
		Subtitle D landfills after
		September 25, 1996. Texas
		Eastman must implement the
		testing program described
		in Table 1. Wastes Excluded From
		Non-Specific Sources for the petition
		to be valid.
Union	Taft, LA.	Contaminated soil (approximately
Carbide		11,000 cubic yards), which contains
Corp		acrolein in concentrations of < 9 ppm

Appendix X [Reserved 12/93]

Appendix XI Other Designated Waste

Hazardous Waste #	Substance	(6/89, 6/95)
5555	Any solid waste the Department determines constitutes a hazard and requires greater control	
7777	Non-hazardous waste received by a hazardous waste facility	